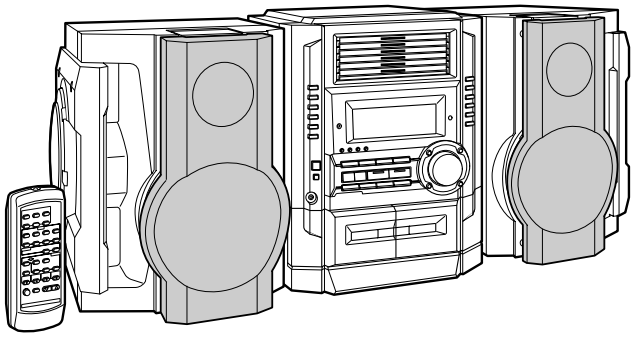
SHARP SERVICE MANUAL

No. S5134CDBA310H



MINI COMPONENT SYSTEM

MODEL CD-BA3100H

CD-BA3100H Mini Component System consisting of CD-BA3100H (main unit) and CP-BA3100H (speaker system).

COMPACT disc DIGITAL AUDIO

R·D·S EON

SAVING ENERGY STAND-BY POWER CONSUMPTION 0.6W

CD-R/RW Playable

6-CD CHANGER

- In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.

- **Note for users in U.K.**
  Recording and playback of any material may require consent which SHARP is unable to give. Please refer particularly to the provisions of Copyright Act 1956, the Dramatic and Musical Performers Protection Act 1956, the Performers Protection Acts 1963 and 1972 and to any subsequent statutory enactments and orders.

CONTENTS

Page

SAFETY PRECAUTION FOR SERVICE MANUAL 2
IMPORTANT SERVICE NOTES (FOR U.K. ONLY) 3
SPECIFICATIONS 3
NAMES OF PARTS 4
OPERATION MANUAL 6
DISASSEMBLY 11
REMOVING AND REINSTALLING THE MAIN PARTS 14
ADJUSTMENT 15
CD CHANGER MECHANISM MAIN BASE PARTS ASSEMBLING/ADJUSTING PROCEDURE 18
BLOCK DIAGRAM 25
SCHEMATIC DIAGRAM / WIRING SIDE OF P.W.BOARD 28
VOLTAGE 47
NOTES ON SCHEMATIC DIAGRAM 48
TYPES OF TRANSISTOR AND LED 48
WAVEFORMS OF CD CIRCUIT 49
TROUBLESHOOTING 50
FUNCTION TABLE OF IC 54
WIRING OF PRIMARILY SUPPLY LEADS (FOR U.K. ONLY) 60
FL DISPLAY 61
REPLACEMENT PARTS LIST/EXPLODED VIEW
PACKING METHOD (FOR U.K. ONLY)

SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

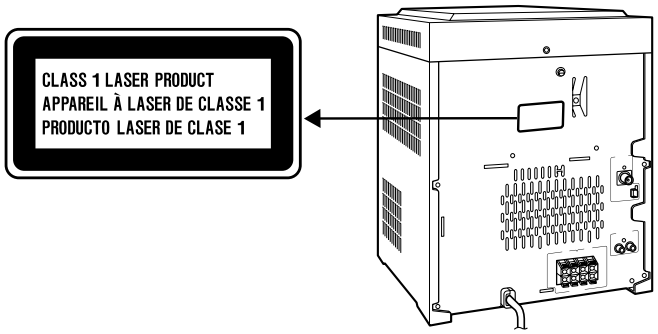
SAFETY PRECAUTION FOR SERVICE MANUAL

Precaution to be taken when replacing and servicing the Laser Pickup.

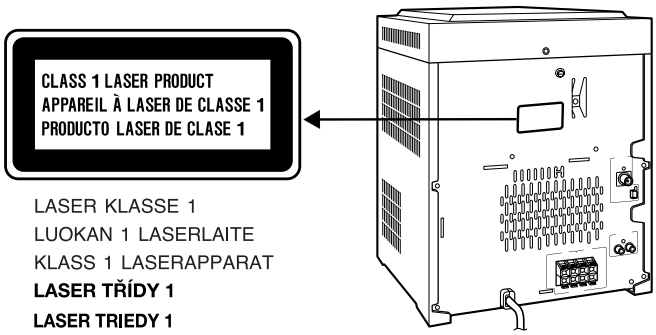
The AEL (Accessible Emission Level) of Laser Power Output for this model is specified to be lower than Class 1 Requirements. However, the following precautions must be observed during servicing to protect your eyes against exposure to the Laser beam.

(1) When the cabinet has been removed, the power is turned on without a compact disc, and the Pickup is on a position outer than the lead-in position, the Laser will light for several seconds to detect a disc. Do not look into the Pickup Lens.
(2) The Laser Power Output of the Pickup inside the unit and replacement service parts have already been adjusted prior to shipping.
(3) No adjustment to the Laser Power should be attempted when replacing or servicing the Pickup.
(4) Under no circumstances look directly into the Pickup Lens at any time.
(5) CAUTION - Use of controls or adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.

(For U.K.)

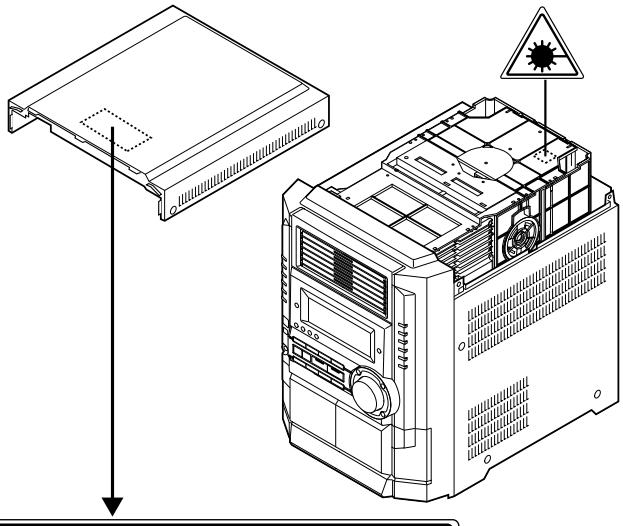


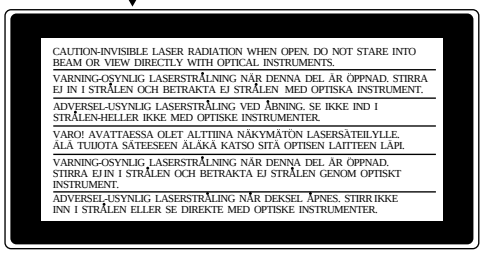
(Except for U.K.)



LASER KLASSE 1
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT
LASER TŘÍDY 1
LASER TRIEDY 1

Laser Diode Properties
Material: GaAlAs
Wavelength: 780 nm
Emission Duration: continuous
Laser Output: max. 0.6 mW




CAUTION-INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.
VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN MED OPTISKA INSTRUMENT.
ADVERSEL-USYNLIG LASERSTRÅLING VED ÅBNING. SE IKKE IND I STRÅLEN-HELLER IKKE MED OPTISKE INSTRUMENTER.
VARO! AVATTAESSA OLET ALTTIINA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ TUIJOTA SÄTEESEEN ÄLÄKÄ KATSO SITÄ OPTISEN LAITTEEN LÄPI.
VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN GENOM OPTISKT INSTRUMENT.
ADVERSEL-USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. STIRR IKKE INN I STRÅLEN ELLER SE DIREKTE MED OPTISKE INSTRUMENTER.

VAROITUS! LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

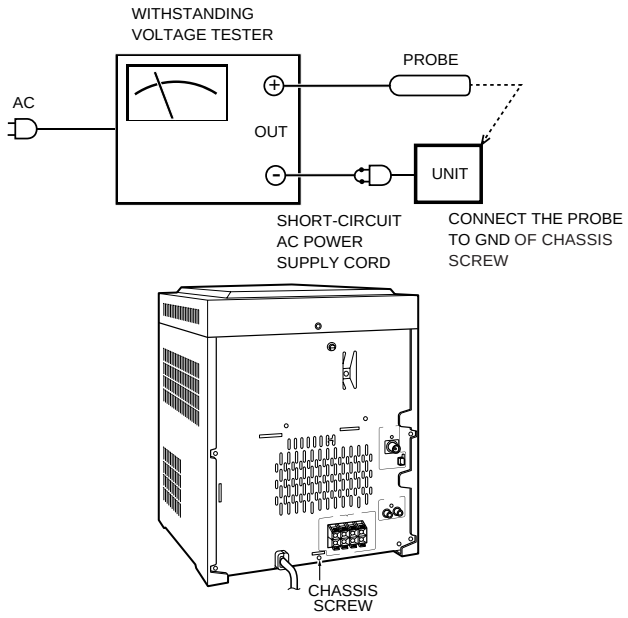
VARNING - OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT ÄN I DENNA BRUKSANVISNING SPECIFICERAS. KAN ANVÄNDAREN UTSÄTTAS FÖR OSYNLIG LASERSTRÅLNING, SOM ÖVERSKRIDER GRÄNSEN FÖR LASERKLASS 1.

IMPORTANT SERVICE NOTES (FOR U.K. ONLY)

Before returning the unit to the customer after completion of a repair or adjustment it is necessary for the following withstand voltage test to be applied to ensure the unit is safe for the customer to use.

Setting of Withstanding Voltage Tester and set.

Set name	set value
Withstanding Voltage Tester	
Test voltage	4,240 VPEAK 3,000 VRMS
Set time	6 secs
Set current (Cutoff current)	4 mA
Unit	
Judgment	
OK: The “GOOD” lamp lights. NG: The “NG” lamp lights and the buzzer sounds.	



FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SPECIFICATIONS

CD-BA3100H

■ General

Power source	AC 230 V, 50 Hz
Power consumption	Power on: 175 W Power stand-by: 0.6 W (*)
Dimensions	Width: 260 mm (10-1/4") Height: 338 mm (13-5/16") Depth: 375 mm (14-13/16")
Weight	8.8 kg (19.4 lbs.)

(*) This power consumption value is obtained when the demonstration mode is cancelled in the power stand-by mode. To cancel the demonstration mode.

■ Amplifier (Except for U.K.)

Output power	PMPO: 668 W MPO: 334 W (167 W + 167 W) (DIN 45 324) Main speaker (woofer and tweeter): 134 W (67 W + 67 W) Subwoofer: 200 W (100 W + 100 W) RMS: 200 W (100 W + 100 W) (DIN 45 324) Main speaker (woofer and tweeter): 80 W (40 W + 40 W) Subwoofer: 120 W (60 W + 60 W) RMS: 184 W (92 W + 92 W) (DIN 45 500) Main speaker (woofer and tweeter): 74 W (37 W + 37 W) Subwoofer: 110 W (55 W + 55 W)
Output terminals	Speakers: 6 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms)
Input terminals	Video/Auxiliary (audio signal): 500 mV/47 kohms

■ Amplifier (For U.K.)

Output power	RMS: 200 W (100 W + 100 W) (10 % T.H.D.) Main speaker (woofer and tweeter): 80 W (40 W + 40 W) Subwoofer: 120 W (60 W + 60 W) RMS: 184 W (92 W + 92 W) (0.9 % T.H.D.) Main speaker (woofer and tweeter): 74 W (37 W + 37 W) Subwoofer: 110 W (55 W + 55 W)
Output terminals	Speakers: 6 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms)
Input terminals	Video/Auxiliary (audio signal): 500 mV/47 kohms

■ CD player

Type	6-disc multi-play compact disc player
Signal readout	Non-contact, 3-beam semiconductor laser pickup
D/A converter	1-bit D/A converter
Frequency response	20 - 20,000 Hz
Dynamic range	90 dB (1 kHz)

■ Tuner

Frequency range	FM: 87.5 - 108 MHz AM: 522 - 1,620 kHz

■ Cassette deck (Except for U.K.)

Frequency response	50 - 14,000 Hz (Normal tape)
Signal/noise ratio	55 dB (TAPE 1, playback) 50 dB (TAPE 2, recording/playback)
Wow and flutter	0.35 % (DIN 45 511)

■ Cassette deck (For U.K.)

Frequency response	50 - 14,000 Hz (Normal tape)
Signal/noise ratio	55 dB (TAPE 1, playback) 50 dB (TAPE 2, recording/playback)
Wow and flutter	0.3 % (WRMS)

CP-BA3100H

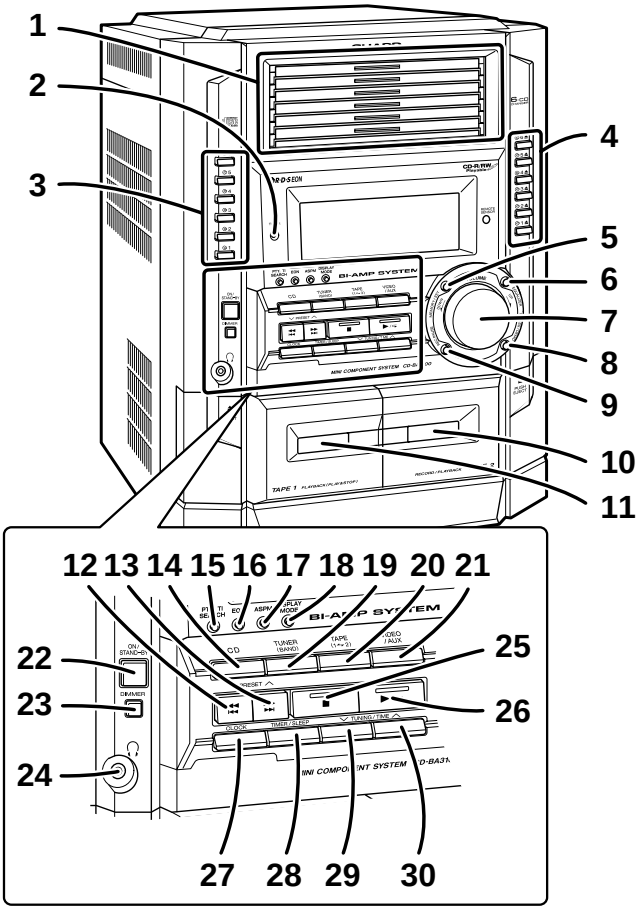
Type	3-way type speaker system 5 cm (2") Tweeter 13 cm (5-1/4") Woofer 13 cm (5-1/4") Subwoofer
Maximum input power (Total)	200 W
Rated input power (Total)	100 W
Impedance	6 ohms
Dimensions	Width: 280 mm (11") Height: 330 mm (13") Depth: 272 mm (10-11/16")
Weight	4.8 kg (10.6 lbs.)/each

Specifications for this model are subject to change without prior notice.

NAMES OF PARTS

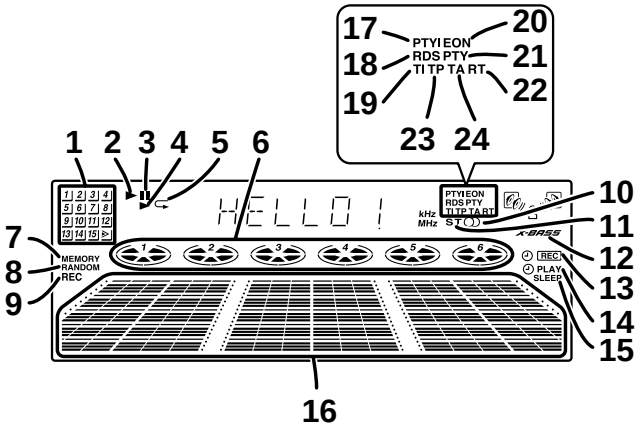
CD-BA3100H

■ Front panel



1. Disc Trays
2. Timer Set Indicator
3. CD Direct Play Buttons
4. CD Eject Buttons
5. Memory/Set Button
6. Equalizer Mode Select Button
7. Volume Control
8. Extra Bass/Demo Mode Button
9. Tape 2 Record Pause Button
10. Tape 2 Cassette Compartment
11. Tape 1 Cassette Compartment
12. CD Track Down or Fast Reverse, Tape 2 Rewind, Tuner Preset Down Button
13. CD Track Up or Fast Forward, Tape 2 Fast Forward, Tuner Preset Up Button
14. CD Button
15. RDS Programme Type/Traffic Information Search Button
16. RDS EON Button
17. RDS ASPM (Auto Station Programme Memory) Button
18. RDS Display Mode Selector Button
19. Tuner (Band) Button
20. Tape (1←2) Button
21. Video/Auxiliary Button
22. On/Stand-by Button
23. Dimmer Button
24. Headphone Socket
25. CD or Tape Stop Button (with Indicator)
26. CD Play or Repeat, Tape Play Button (with Indicator)
27. Clock Button
28. Timer/Sleep Button
29. Tuning and Time Down Button
30. Tuning and Time Up Button

■ Display

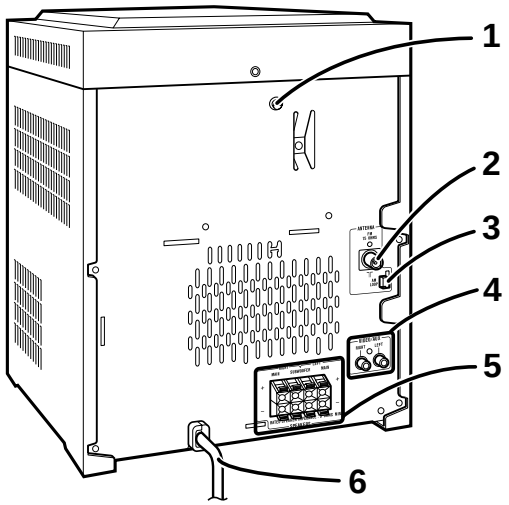


1. CD Music Schedule Indicators
2. CD Play Indicator
3. CD Pause Indicator
4. Tape Play Indicator
5. CD Repeat Play Indicator
6. CD Indicators
7. Memory Indicator
8. CD Random Play Indicator
9. Tape 2 Record Indicator
10. FM Stereo Receiving Indicator
11. FM Stereo Mode Indicator
12. Extra Bass Indicator
13. Timer Recording Indicator
14. Timer Play Indicator
15. Sleep Indicator
16. Spectrum Analyser/Volume Level Indicator
17. Dynamic PTY Indicator
18. RDS Indicator
19. Traffic Information Indicator
20. EON Indicator
21. Programme Type Indicator
22. Radio Text Indicator
23. Traffic Programme Indicator
24. Traffic Announcement Indicator

CD-BA3100H

■ Rear panel

1. Transport screw
2. FM 75 Ohms Aerial Socket
3. AM Loop Aerial Socket
4. Video/Auxiliary (Audio Signal) Input Sockets
5. Speaker Terminals
6. AC Power Lead

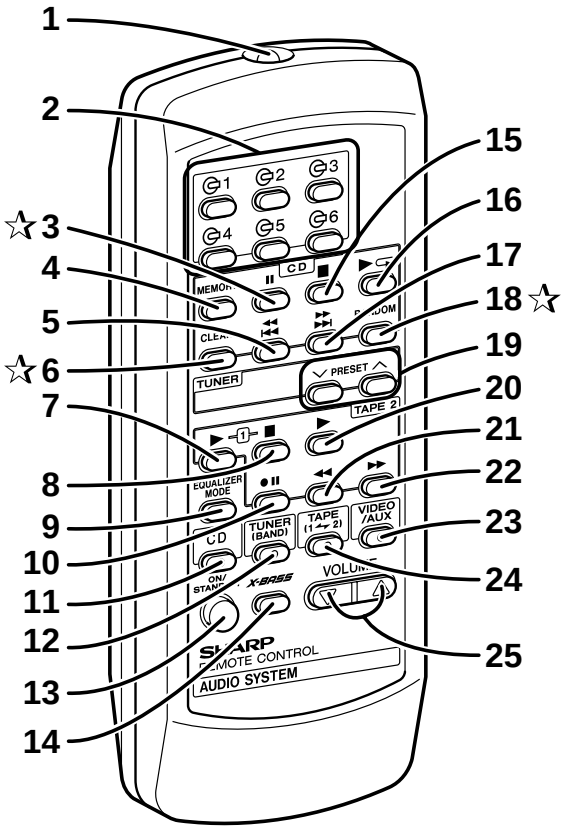


■ Transport screw

This product has a transport screw.
Be sure to drive it when transpoting the unit.
Before tuning the power on, be sure to remove the transport screw on the back of the unit using a flat-blade screwdriver a coin.

■ Remote control

1. Remote Control Transmitter
2. CD Direct Play Buttons
3. CD Pause Button
4. CD Memory Button
5. CD Track Down or Fast Reverse Button
6. CD Clear Button
7. Tape 1 Play Button
8. Tape 1/Tape 2 Stop Button
9. Equalizer Mode Select Button
10. Tape 2 Record Pause Button
11. CD Button
12. Tuner (Band) Button
13. On/Stand-by Button
14. Extra Bass Button
15. CD Stop Button
16. CD Play or Repeat Button
17. CD Track Up or Fast Forward Button
18. CD Random Button
19. Tuner Preset Up and Down Buttons
20. Tape 2 Play Button
21. Tape 2 Rewind Button
22. Tape 2 Fast Forward Button
23. Video/Auxiliary Button
24. Tape (1↔2) Button
25. Volume Up and Down Buttons



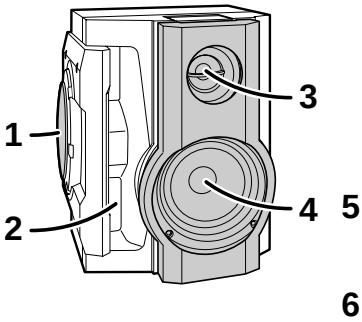
Buttons with "☆" mark in the illustration can be operated on the remote control only.
Other buttons can be operated both on the main unit and the remote control.

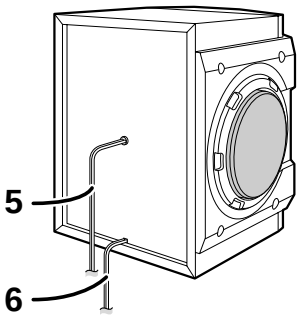
CD-BA3100H

CP-BA3100H

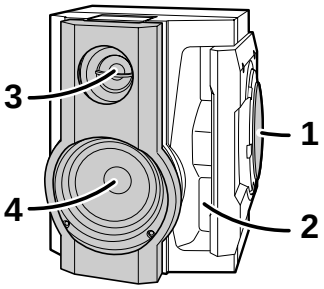
1. Subwoofer
2. Bass Reflex Duct
3. Tweeter
4. Woofer
5. Speaker wire for SUBWOOFER terminals
6. Speaker wire for MAIN terminals

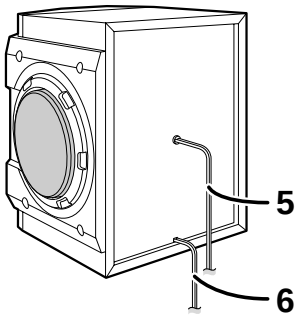
Left speaker





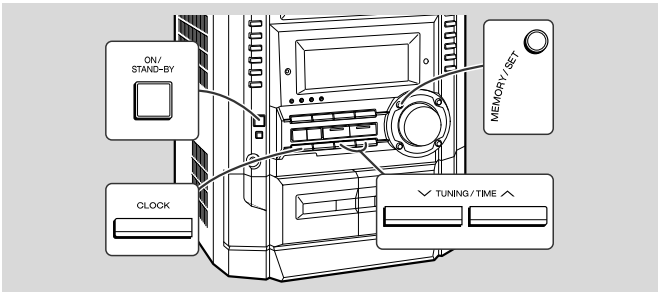
Right speaker





OPERATION MANUAL

Setting the Clock



In this example, the clock is set for the 24-hour (0:00) display.

1 **Press the ON/STAND-BY button to turn the power on.**

2 **Press the CLOCK button and within 5 seconds, press the MEMORY/SET button.**

3 **Press the TUNING/TIME (∨ or ∧) button to select 24-hour or 12-hour display and then press the MEMORY/SET button.**

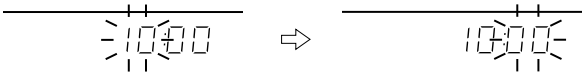
"0:00" → The 24-hour display will appear.
(0:00 - 23:59)

"AM 12:00" → The 12-hour display will appear.
(AM 12:00 - PM 11:59)

"AM 0:00" → The 12-hour display will appear.
(AM 0:00 - PM 11:59)

Note that this can only be set when the unit is first installed or it has been reset. [Refer to "Clearing all the memory (reset)".]

4 **Press the TUNING/TIME (∨ or ∧) button to adjust the hour and then press the MEMORY/SET button.**

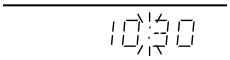


- Press the TUNING/TIME (∨ or ∧) button once to advance the time by 1 hour. Hold it down to advance continuously.
- When the 12-hour display is selected, "AM" will change automatically to "PM".

5 **Press the TUNING/TIME (∨ or ∧) button to adjust the minutes and then press the MEMORY/SET button.**

- Press the TUNING/TIME (∨ or ∧) button once to advance the time by 1 minute. Hold it down to change the time in 5-minute intervals.
- The hour will not advance even if minutes advance from "59" to "00".
- The clock begins counting from "0" seconds. (Seconds are not displayed.) The time display will disappear after a few seconds.

To confirm the time display:
Press the CLOCK button.
The time display will appear for about 5 seconds.



Note:
The "CLOCK" or time will flash at the push of the CLOCK button when the AC power supply is restored after a power failure or unplugging the unit.
Readjust the clock as follows.

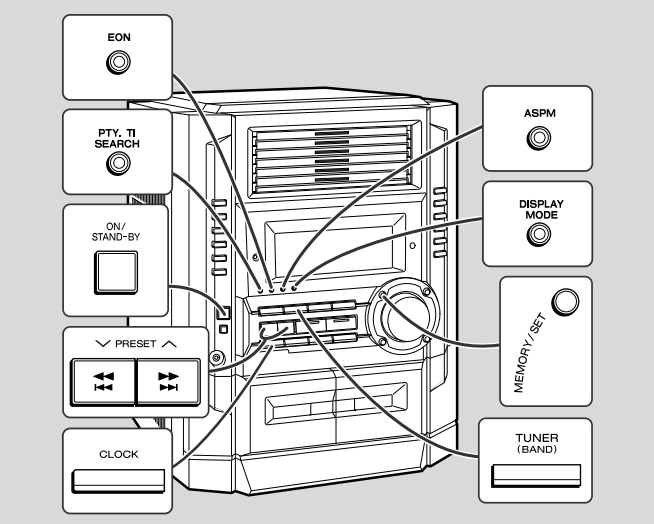
To readjust the clock:
Perform "Setting the Clock" from the beginning. If the time display is flashing, step 3 (for selecting the 24-hour or 12-hour display) will be skipped.

To change the 24-hour or 12-hour display:
1 Clear all the programmed contents. [Refer to "Clearing all the memory (reset)".]
2 Perform "Setting the Clock" from the beginning.

Using the Radio Data System (RDS)

RDS is a broadcasting service which a growing number of FM stations provide. These FM stations send additional signals along with their regular programme signals. They send their station names, and information about the type of programme such as sports or music, etc.
When tuned to an RDS station, "RDS" and the station name will be displayed.
"TP" (Traffic Programme) will appear on the display when the received broadcast carries traffic information, and "TA" (Traffic Announcement) will appear whilst a traffic information is on air.
"EON" will appear whilst the EON (Enhanced Other Networks information) data is broadcast.
"PTYI" (Dynamic PTY Indicator) will appear whilst the Dynamic PTY station is received.
"RT" (Radio Text) will appear whilst the unit receives the Radio text data.
"CT" (Clock Time) will appear whilst the unit receives the RDS CT data.

You can control the RDS by using the buttons on the main unit only.

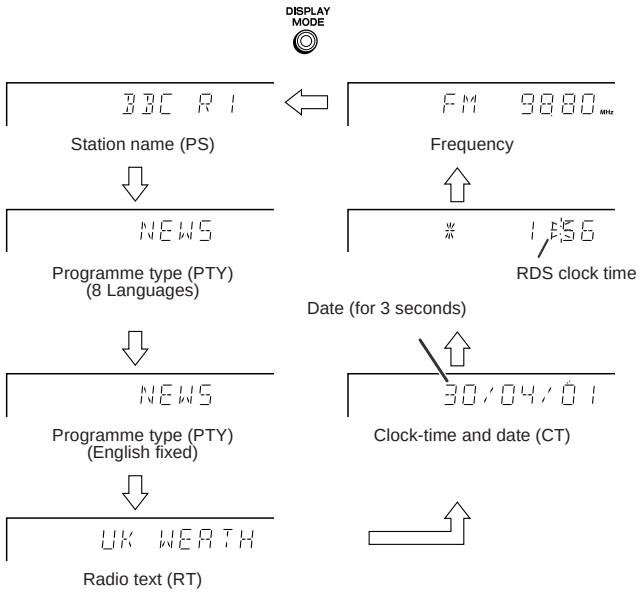


Descriptions of the PTY (Programme Type) codes, TP (Traffic Programme) and TA (Traffic Announcement).
You can search for and receive the following PTY, TP and TA signals.

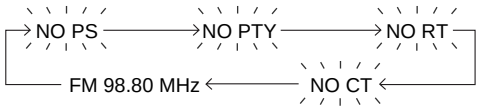
NEWS	Short accounts of facts, events and publicly expressed views, reportage and actuality.
AFFAIRS	Topical programme expanding or enlarging upon the news, generally in different presentation style or concept, including debate, or analysis.
INFO	Programmes whose purpose is to impart advice in the widest sense.
SPORT	Programme concerned with any aspect of sport.
EDUCATE	Programme intended primarily to educate, of which the formal element is fundamental.
DRAMA	All radio plays and serials.
CULTURE	Programmes concerned with any aspect of national or regional culture, including language, theatre, etc.
SCIENCE	Programmes about the natural sciences and technology.
VARIED	Used for mainly speech-based programmes usually of light-entertainment nature, not covered by other categories. Examples include: quizzes, panel games, personality interviews.
POP M	Commercial music, which would generally be considered to be of current popular appeal, often featuring in current or recent record sales charts.
ROCK M	Contemporary modern music, usually written and performed by young musicians.
EASY M	Current contemporary music considered to be "easy-listening", as opposed to Pop, Rock or Classical, or one of the specialised music styles, Jazz, Folk or Country. Music in this category is often but not always, vocal, and usually of short duration.
LIGHT M	Classical music for general, rather than specialist appreciation. Examples of music in this category are instrumental music, and vocal or choral works.
CLASSICS	Performances of major orchestral works, symphonies, chamber music, etc., and including Grand Opera.
OTHER M	Musical styles not fitting into any of the other categories. Particularly used for specialist music of which Rhythm & Blues and Reggae are examples.
WEATHER	Weather reports and forecasts and meteorological information.
FINANCE	Stock Market reports, commerce, trading, etc.
CHILDREN	For programmes targeted at a young audience, primarily for entertainment and interest, rather than where the objective is to educate.

■ Information provided by RDS

Each time the DISPLAY MODE button is pressed, the display will switch as follows:



When you are tuning in to a station other than an RDS station or to an RDS station which sends weak signal, the display will change in the following order:



SOCIAL	Programmes about people and things that influence them individually or in groups. Includes: sociology, history, geography, psychology and society.
RELIGION	Any aspect of beliefs and faiths, involving a God or Gods, the nature of existence and ethics.
PHONE IN	Involving members of the public expressing their views either by phone or at a public forum.
TRAVEL	Features and programmes concerned with travel to near and far destinations, package tours and travel ideas and opportunities. Not for use for announcements about problems, delays, or roadworks affecting immediate travel where TP/TA should be used.
LEISURE	Programmes concerned with recreational activities in which the listener might participate. Examples include, Gardening, Fishing, Antique collecting, Cooking, Food & Wine, etc.
JAZZ	Polyphonic, syncopated music characterised by improvisation.
COUNTRY	Songs which originate from, or continue the musical tradition of the American Southern States. Characterised by a straightforward melody and narrative story line.
NATION M	Current Popular Music of the Nation or Region in that country's language, as opposed to International 'Pop' which is usually US or UK inspired and in English.
OLDIES	Music from the so-called "golden age" of popular music.
FOLK M	Music which has its roots in the musical culture of a particular nation, usually played on acoustic instruments. The narrative or story may be based on historical events or people.
DOCUMENT	Programme concerned with factual matters, presented in an investigative style.
TEST	Broadcast when testing emergency broadcast equipment or receivers.
ALARM !	Emergency announcement made under exceptional circumstances to give warning of events causing danger of a general nature.
NONE	No programme type (receive only).
TP	Broadcasts which carry traffic announcements.
TA	Traffic announcements are being broadcast.

Note:
When you select a programme in the EON stand-by mode, the unit will display "TI" instead of "TA".

Troubleshooting Chart

Many potential "problems" can be resolved by the owner without calling a service technician.
If something is wrong with this product, check the following before calling your authorised SHARP dealer or service centre.

■ General

Symptom	Possible cause
● The clock is not on time.	● Did a power failure occur? Reset the clock.
● When a button is pressed, the unit does not respond.	● Set this unit to the power stand-by mode and then turn it back on. ● If the unit still malfunctions, reset it.
● No sound is heard.	● Is the volume level set to "0"? ● Are the headphones connected? ● Are the speaker wires disconnected?

■ CD player

Symptom	Possible cause
● Playback does not start. ● Playback stops in the middle or is not performed properly.	● Is the disc loaded upside down? ● Does the disc satisfy the standards? ● Is the disc distorted or scratched?
● Playback sounds are skipped, or stopped in the middle of a track.	● Is the unit located near excessive vibrations? ● Is the disc very dirty? ● Has condensation formed inside the unit?

■ Tuner

Symptom	Possible cause
● Radio makes unusual noise consecutively.	● Is the unit placed near the TV or computer? ● Is the FM aerial or AM loop aerial placed properly? Move the AC power lead away from the aerial if located near.

■ Cassette deck

Symptom	Possible cause
● Cannot record.	● Is the erase-prevention tab removed?
● Cannot record tracks with proper sound quality. ● Cannot erase completely.	● Is it a normal tape? (You cannot record on a metal or CrO_2 tape.)
● Sound skipping. ● Cannot hear treble. ● Sound fluctuation.	● Is there any slack? ● Is the tape stretched? ● Are the capstans, pinch rollers, or heads dirty?
● Cannot remove the tape.	● If a power failure occurs during playback, the heads remain engaged with the tape. Do not open the compartment forcibly. Wait until electricity resumes.

■ Remote control

Symptom	Possible cause
● The remote control does not operate.	● Is the AC power lead of the unit plugged in? ● Is the battery polarity respected? ● Are the batteries dead? ● Is the distance or angle incorrect? ● Does the remote control sensor receive strong light?

Troubleshooting Chart

■ If trouble occurs

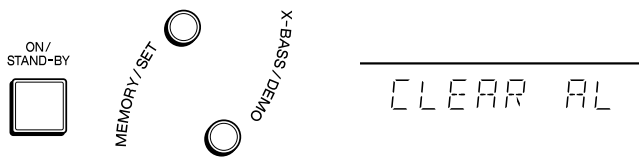
When this product is subjected to strong external interference (mechanical shock, excessive static electricity, abnormal supply voltage due to lightning, etc.) or if it is operated incorrectly, it may malfunction.

If such a problem occurs, do the following:
1 Set the unit to the stand-by mode and turn the power on again.
2 If the unit is not restored in the previous operation, unplug and plug in the unit, and then turn the power on.

Note:
If neither operation above restores the unit, clear all the memory by resetting it.

■ Clearing all the memory (reset)

1 Press the ON/STAND-BY button to enter the power stand-by mode.
2 Whilst pressing down the MEMORY/SET button and the X-BASS/DEMO button, press the ON/STAND-BY button until "CLEAR AL" appears.

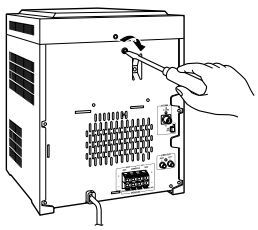


Caution:
This operation will erase all data stored in memory including clock, timer settings, tuner preset, and CD programme.

■ Before transporting the unit

On the back of this unit is equipped with a transport screw in order to prevent damage during transportation.

1 Press the ON/STAND-BY button to turn the power on.
2 Remove all discs from the unit, close the disc tray.
"NO DISC" is displayed.
3 Press the ON/STAND-BY button to enter the stand-by mode.
"GOOD-BYE" is displayed.
4 When "GOOD-BYE" disappears, unplug the AC power lead from the wall socket.
5 Insert the transport screw into the back of the unit and tighten it with a flat-blade screwdriver or a coin.

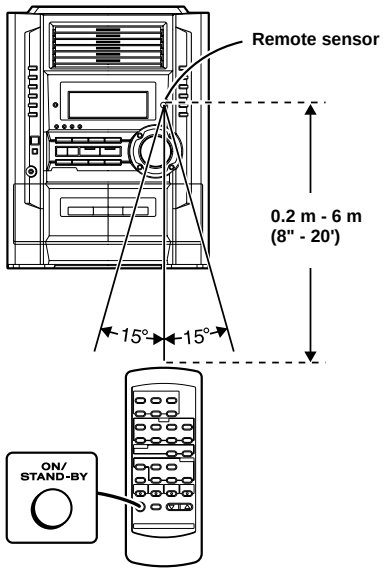


Remote Control

■ Test of the remote control

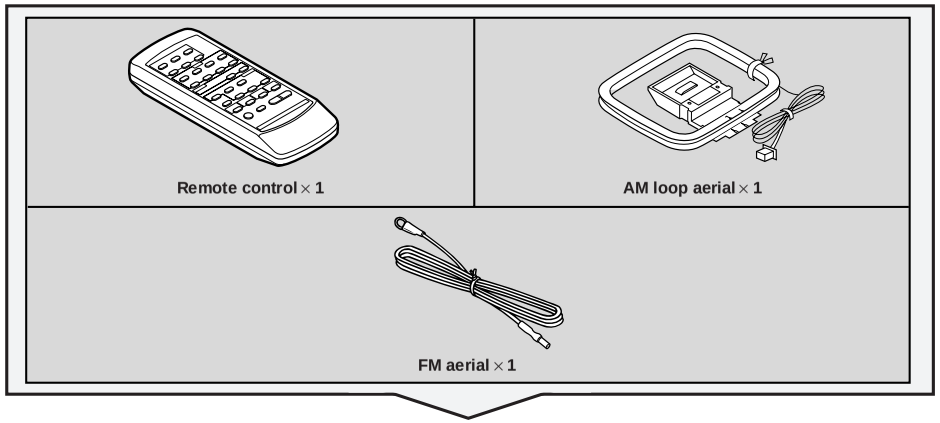
Check the remote control after checking all connections have been made correctly. Face the remote control directly to the remote sensor on the unit.

The remote control can be used within the range shown below:
Press the ON/STAND-BY button. Does the power turn on? Now, you can enjoy the music.



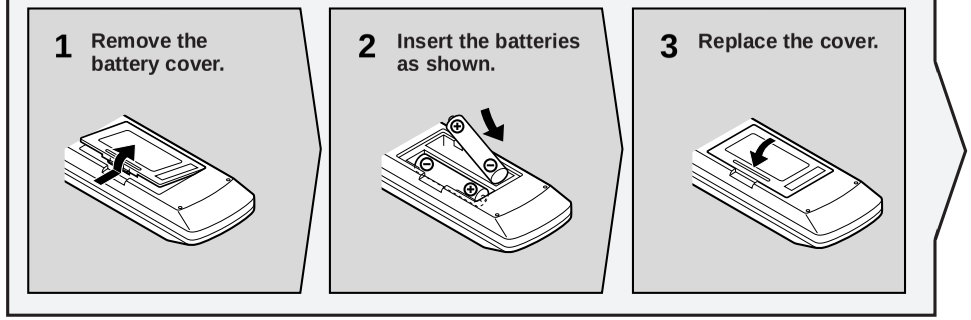
Notes concerning use:
- Replace the batteries if the operating distance is reduced or if the operation becomes erratic. Purchase 2 "AA" size batteries (UM/SUM-3, R6, HP-7 or similar).
- Periodically clean the transmitter on the remote control and the sensor on the unit with a soft cloth.
- Exposing the sensor on the unit to strong light may interfere with operation. Change the lighting or the direction of the unit.
- Keep the remote control away from moisture, heat, shock, and vibrations.

1 Accessories

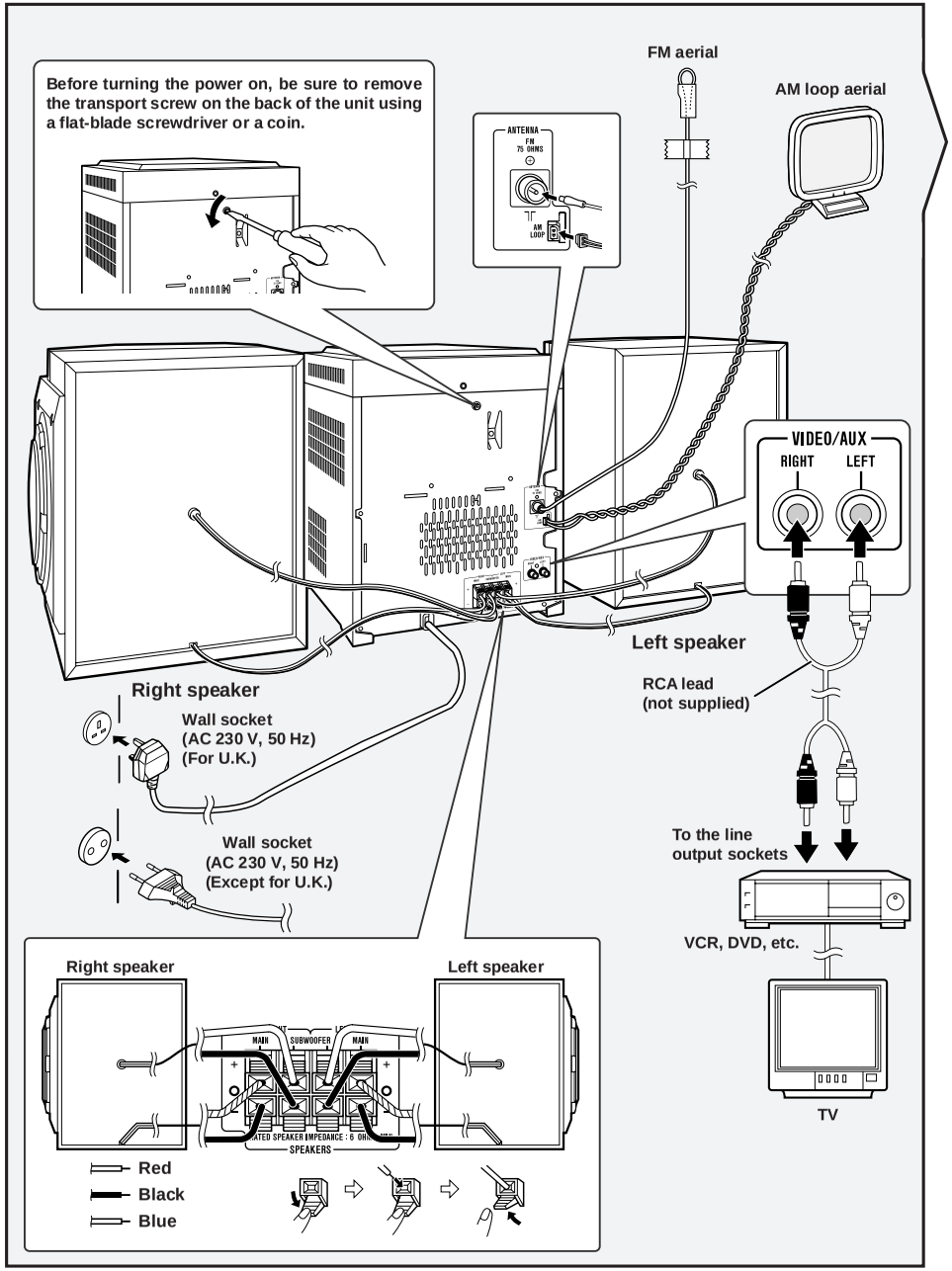


2 Battery installation of remote control

Use 2 “AA” size batteries (UM/SUM-3, R6, HP-7 or similar). Batteries are not included.



3 System connections

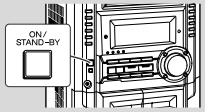


4 Turn on your system

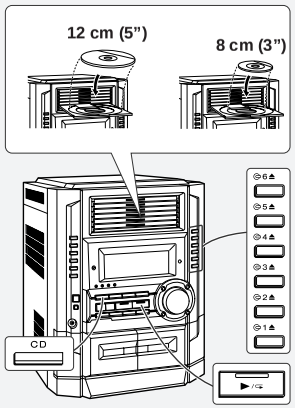
The first time the unit is plugged, the unit will enter the demonstration mode. You will see words scroll.

1 Press the X-BASS/DEMO button to cancel the demonstration mode.

2 Press the ON/STAND-BY button to turn the power on.



Listening to a CD (CDs)



1 CD — Press the CD button.

2 ⊖1⏏ — Press the ⊖ 1 ⏏ button to open the disc tray 1.

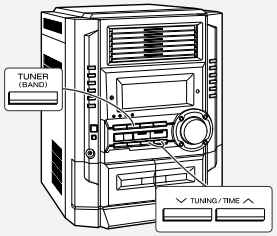
3 Place the CD on the disc tray 1, label side up.

4 ⊖1⏏ — Press the ⊖ 1 ⏏ button to close the disc tray 1.

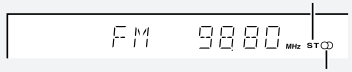
5 You can place discs on the trays 2 - 6 by following steps 2 - 4.

6 ▶/⊂ — Press the ▶/⊂ button to start playback.

Listening to the radio



FM stereo mode indicator



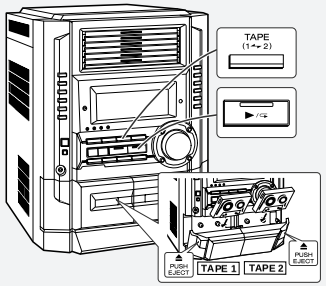
FM stereo receiving indicator

1 TUNER (BAND) — Press the TUNER (BAND) button repeatedly to select the desired frequency band (FM or AM).

2 TUNING/TIME ∨ ∧ — Press the TUNING/TIME (∨ or ∧) button to tune in to the desired station. When the TUNING/TIME button is pressed for more than 0.5 seconds, scanning will start automatically and the tuner will stop at the first receivable broadcast station.

TUNER (BAND) — To receive an FM stereo transmission:
Press the TUNER (BAND) button to display the "ST" indicator.
- "⊙" will appear when an FM broadcast is in stereo.

Listening to a cassette tape (TAPE 1 or TAPE 2)



1 Open the cassette door by pushing the area marked "⏏ PUSH EJECT".

2 Load a cassette into the TAPE 1 or TAPE 2 cassette compartment with the side to be played facing toward you.

3 TAPE (1⇀2) — Press the TAPE (1⇀2) button to select the cassette you want to listen to.

4 ▶/⊂ — Press the ▶/⊂ button to start playback.

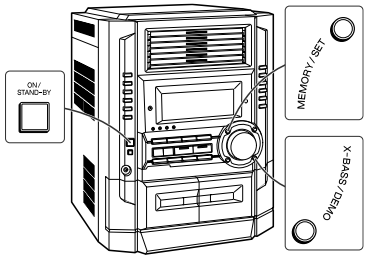
■ If trouble occurs

When this product is subjected to strong external interference (mechanical shock, excessive static electricity, abnormal supply voltage due to lightning, etc.) or if it is operated incorrectly, it may malfunction.

If such a problem occurs, do the following:

1. **Set the unit to the stand-by mode and turn the power on again.**
2. **If the unit is not restored in the previous operation, unplug and plug in the unit, and then turn the power on.**

Note:
If neither operation above restores the unit, clear all the memory by resetting it.



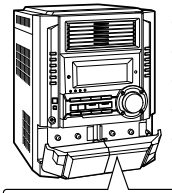
■ Clearing all the memory (reset)

1. **Press the ON/STAND-BY button to enter the power stand-by mode.**
2. **Whilst pressing down the MEMORY/SET button and the X-BASS/DEMO button, press the ON/STAND-BY button until "CLEAR AL" appears.**

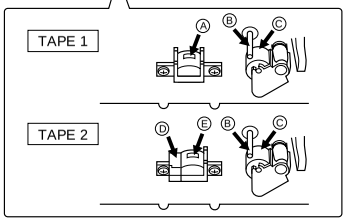
Caution:
This operation will erase all data stored in memory including clock, timer settings, tuner preset, and CD programme.

■ Maintenance

- **Dirty heads, capstans or pinch rollers can cause poor sound and tape jams. Clean these parts with a cotton swab moistened with commercial head/pinch roller cleaner or isopropyl alcohol.**
- **When cleaning the heads, pinch rollers, etc., unplug the unit which contains high voltages.**
- **After long use, the deck's heads and capstans may become magnetised, causing poor sound. Demagenetise these parts once every 30 hours of playing/recording time by using a commercial tape head demagnetiser. Read the demagnetiser's instructions carefully before use.**
- **Clean the dust or stain on the CD pickup lens using a commercial cleaning disc (brush type).**



Ⓐ Playback head
Ⓑ Capstan
Ⓒ Pinch roller
Ⓓ Erase head
Ⓔ Recording/Playback head



DISASSEMBLY

Caution on Disassembly

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:

1. Take cassette tape and compact disc out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

CD-BA3100H

STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw ..... (A1) x5	11-1
2	Side Panel (Left/Right)	1. Screw ..... (B1) x10 2. Hook ..... (B2) x2	11-1
3	Rear Panel with Fan Motor	1. Screw ..... (C1) x2 2. Screw ..... (C2) x6 3. Screw ..... (C3) x2 4. Socket ..... (C4) x1	11-2
4	CD Changer Unit	1. Socket ..... (D1) x2 2. Hook ..... (D2) x2 3. Flat Cable ..... (D3) x1	11-2 11-3
5	Main PWB	1. Screw ..... (E1) x1 2. Socket ..... (E2) x3	11-2 11-3
6	Power Amp. PWB	1. Screw ..... (F1) x6 2. Socket ..... (F2) x4 3. Flat Wire ..... (F3) x1 4. PWB Holder ..... (F4) x2	12-1 11-3,12-1 12-1
7	Front Panel	1. Screw ..... (G1) x2 2. Hook ..... (G2) x2	12-1
8	Eject Switch PWB	1. Screw ..... (H1) x2 2. Socket..... (H2) x1	12-2
9	Play Switch PWB	1. Screw ..... (J1) x2	12-2
10	Display PWB	1. Knob ..... (K1) x1 2. Screw ..... (K2) x9 3. Flat Cable ..... (K3) x1	12-2
11	Headphones PWB	1. Screw ..... (L1) x1 2. PWB Washer ..... (L2) x1	12-2
12	Tape Mechanism	1. Open the cassette holder. 2. Screw ..... (M1) x6	12-2

CD-BA3100H

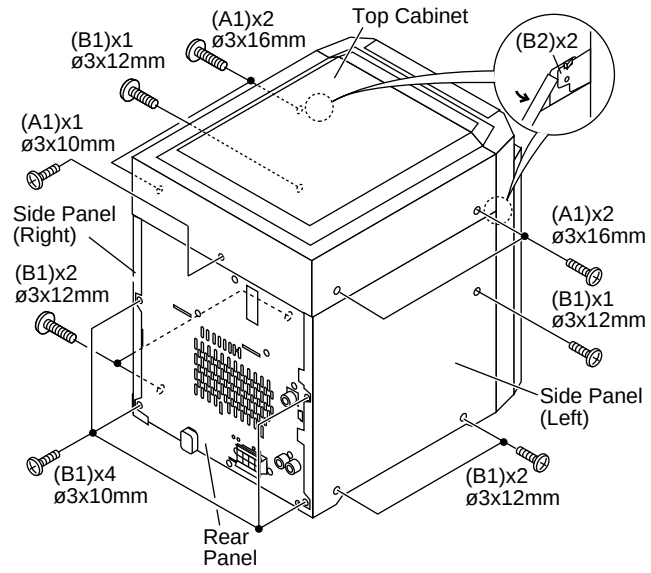


Figure 11-1

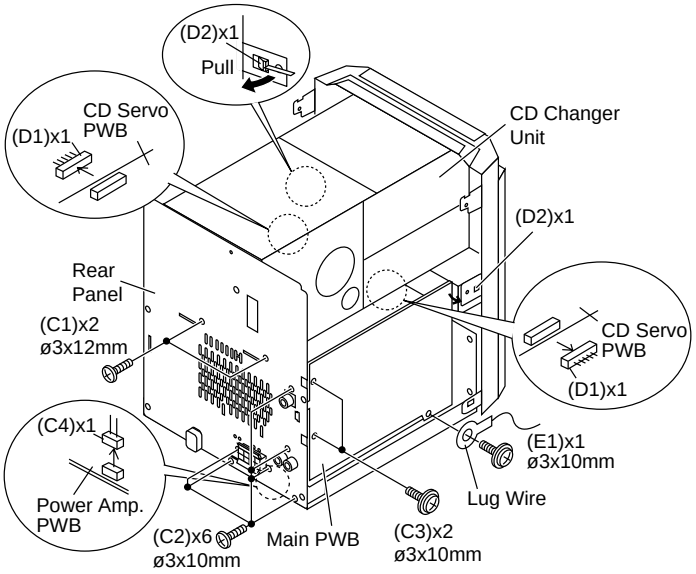


Figure 11-2

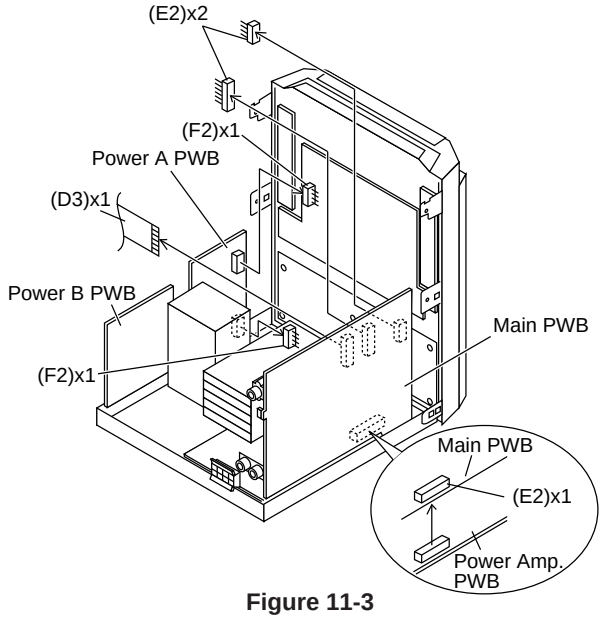


Figure 11-3

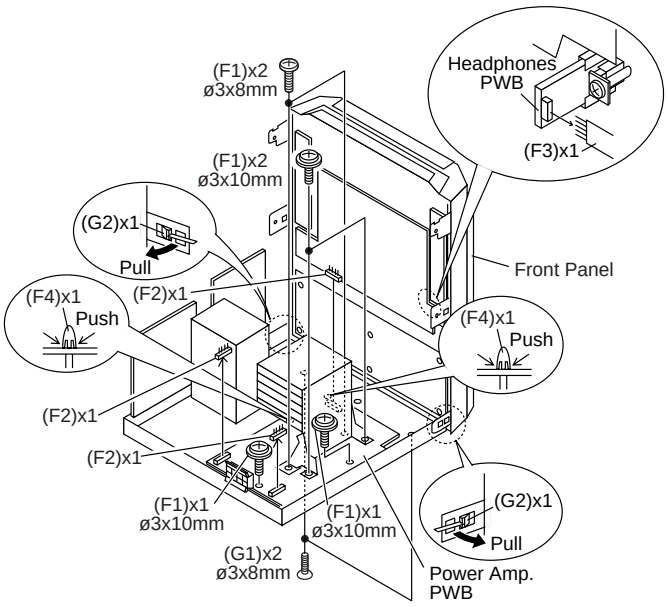


Figure 12-1

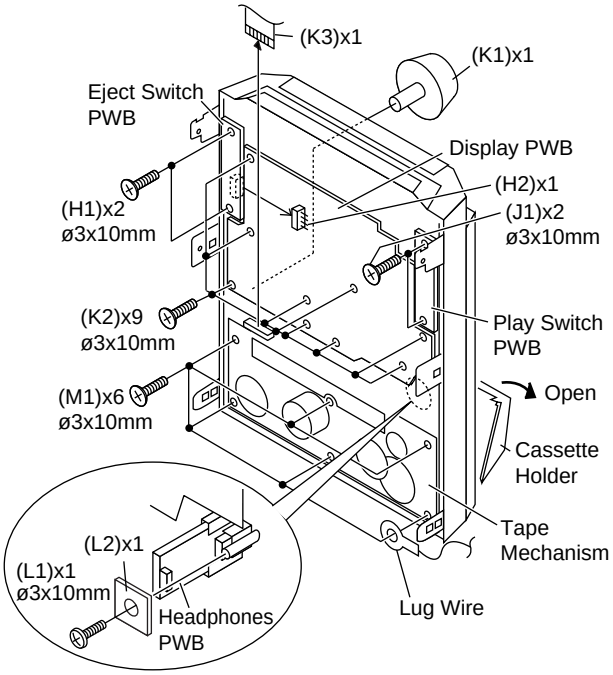


Figure 12-2

CD-BA3100H (CD CHANGER MECHANISM UNIT)			
STEP	**REMOVAL**	**PROCEDURE**	**FIGURE**
1	Top Cabinet	1. Screw ..... (A1) x5	11-1
2	Side Panel (Left/Right)	1. Screw ..... (B1) x10 2. Hook ..... (B2) x2	11-1
3	Rear Panel with Fan Motor	1. Screw ..... (C1) x2 2. Screw ..... (C2) x6 3. Screw ..... (C3) x2 4. Socket ..... (C4) x1	11-2
4	CD Changer Unit	1. Socket ..... (D1) x2 2. Hook ..... (D2) x2 3. Flat Cable ..... (D3) x1	11-2 11-3
5	CD Servo PWB (Note)	1. Screw ..... (N1) x4 2. Screw ..... (N2) x4 3. Socket ..... (N3) x4 4. Flat Wire ..... (N4) x2	12-3
6	CD Mechanism	1. Screw ..... (P1) x4	12-3

Note:
After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of connector remove to protect the optical pickup from electrostatic damage.

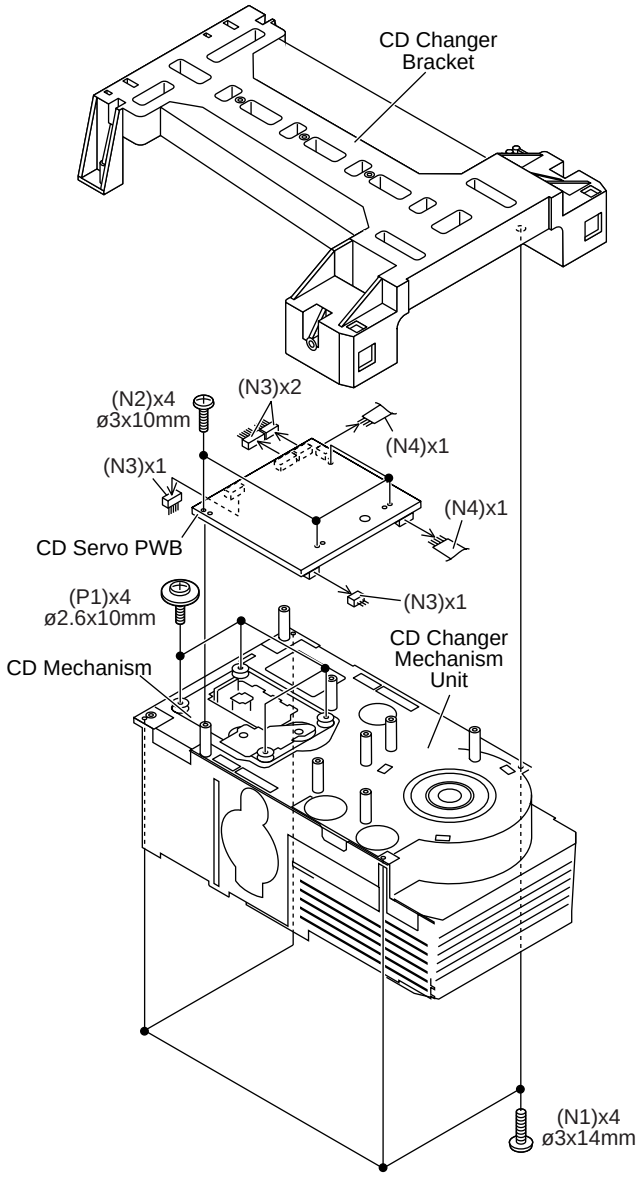


Figure 12-3

CP-BA3100H

STEP	REMOVAL	PROCEDURE	FIGURE
1	Side Panel/ Front Panel	1. Screw ..... (A1) x4 2. Net..... (A2) x1 3. Catching Holder ..... (A3) x4 4. Screw ..... (A4) x4	13-1
2	Subwoofer	1. Screw ..... (B1) x4	13-2
3	Woofer	1. Screw ..... (C1) x4	13-2
4	Tweeter	1. Screw ..... (D1) x2	13-2

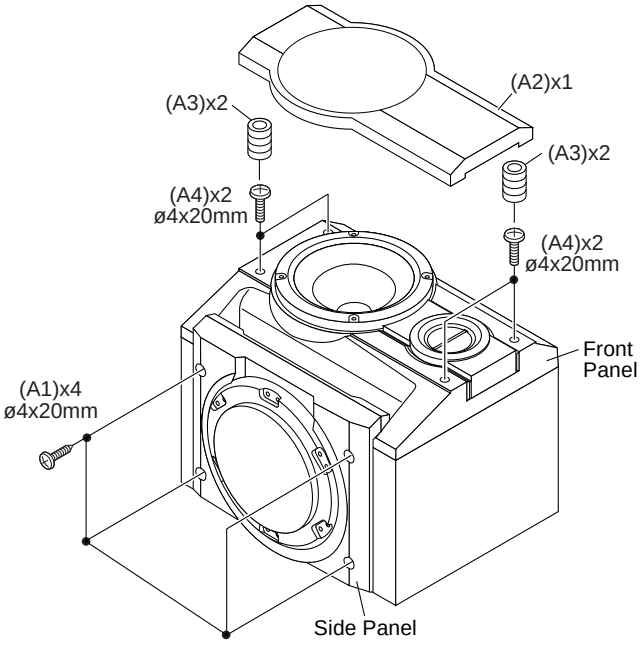


Figure 13-1

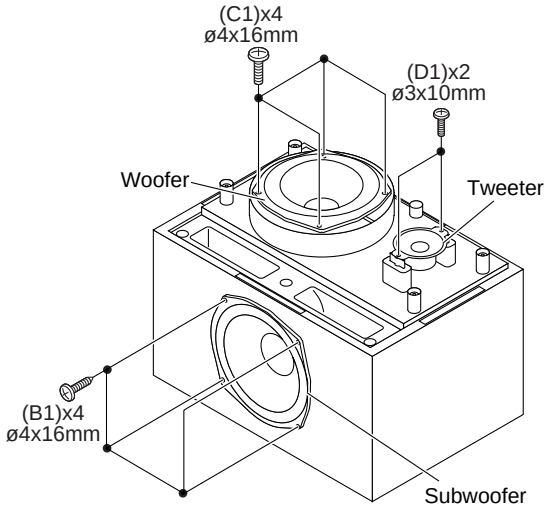


Figure 13-2

REMOVING AND REINSTALLING THE MAIN PARTS

TAPE MECHANISM SECTION

Perform steps 1 to 3 and 7, 12 of the disassembly method to remove the tape mechanism. (See page 11.)

How to remove the record/playback and erase heads (TAPE 2) (See Fig. 14-1)

1. When you remove the screws (A1) x 2 pcs., the record/playback head and three-dimensional head of the erase head can be removed.

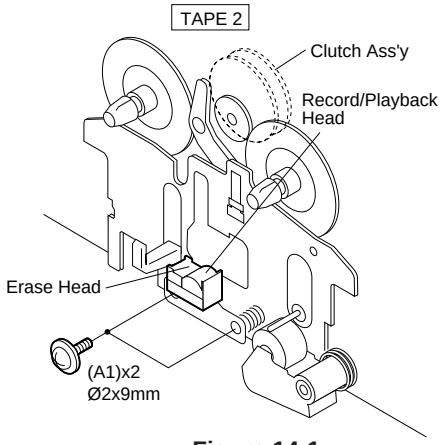


Figure 14-1

How to remove the playback head (TAPE 1) (See Fig. 14-2)

1. When you remove the screws (B1) x 2 pcs., the playback head.

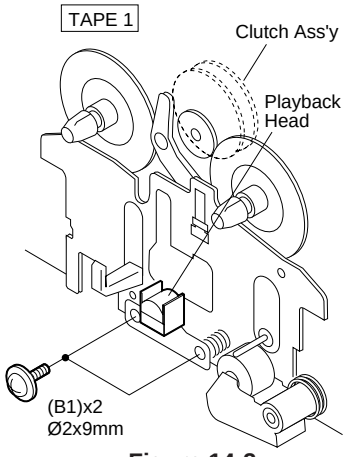


Figure 14-2

How to remove the pinch roller (TAPE 1/2) (See Fig. 14-3)

1. Carefully bend the pinch roller pawl in the direction of the arrow **<A>**, and remove the pinch roller (C1) x 1 pc., in the direction of the arrow **<B>**.

Note:
When installing the pinch roller, pay attention to the spring mounting position.

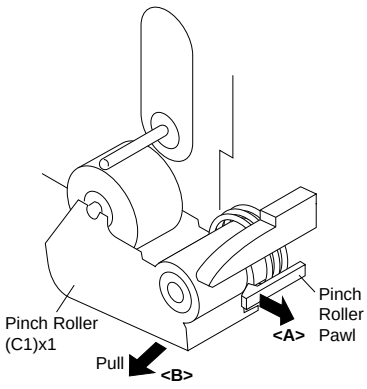


Figure 14-3

How to remove the belt (TAPE 2) (See Fig. 14-4)

1. Remove the main belt (D1) x 1 pc., from the motor side.
2. Remove the FF/REW belt (D2) x 1 pc.

How to remove the belt (TAPE 1) (See Fig. 14-4)

1. Remove the main belt (E1) x 1 pc., from the motor side.
2. Remove the FF/REW belt (E2) x 1 pc.

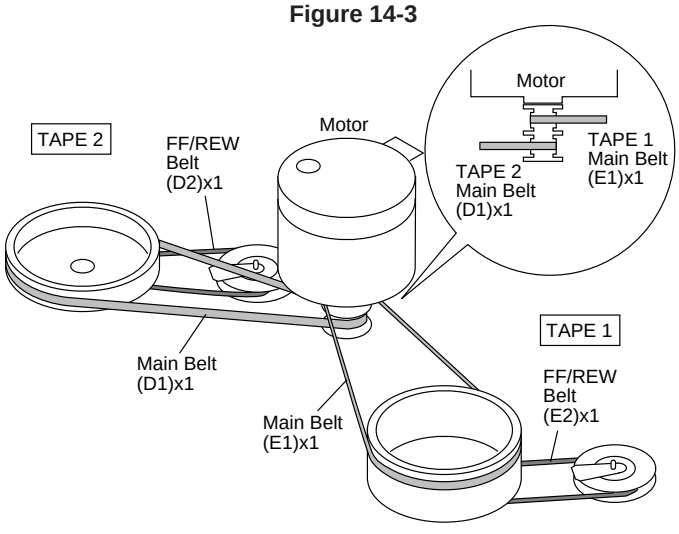


Figure 14-4

How to remove the motor (See Fig. 14-5)

1. Remove the screws (F1) x 2 pcs., to remove the motor.

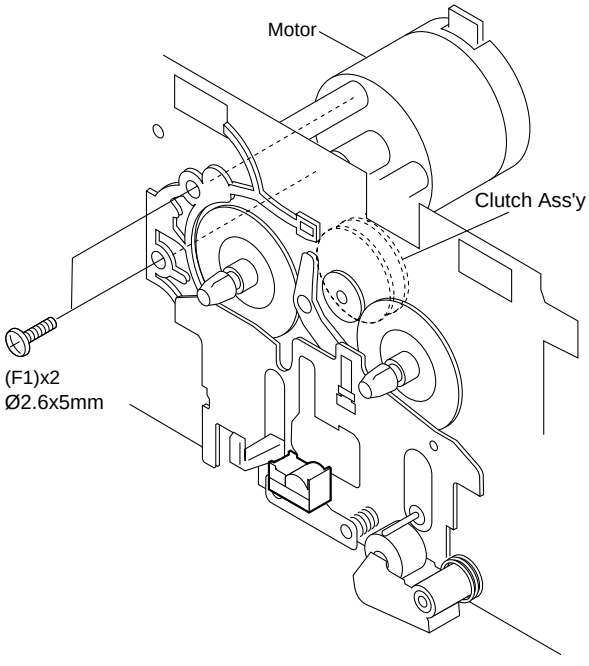


Figure 14-5

CD MECHANISM SECTION

Perform steps 1 to 6 of the disassembly method to remove the CD mechanism. (See page 12.)

How to Remove the pickup (See Fig. 15-1)

1. Remove the screws (A1)x 2 pcs., to remove shaft (A2)x 1 pc.
2. Remove stop washer (A3)x 1 pc., to remove gear (A4)x 1 pc.
3. Remove the pickup.

Note:
After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of connector remove to protect the optical pickup from electrostatic damage.

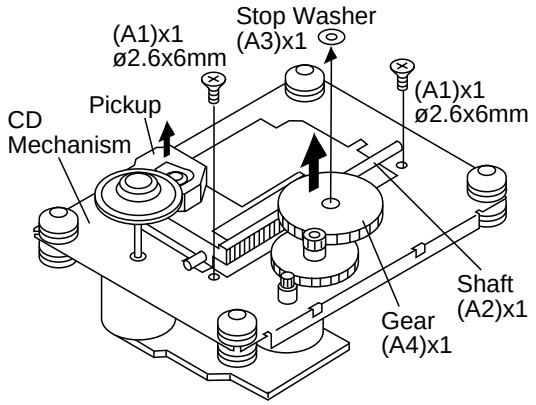


Figure 15-1

CD CHANGER MECHANISM SECTION

Perform steps 1 to 4 of the disassembly method to remove the CD changer mechanism. (See page 11.)

How to Remove the tray motor/main cam motor (See Fig. 15-2)

1. Remove the screws (B1)x 4 pcs., to remove the CD Servo PWB.
2. Remove the (1) front top plate, (2) changer box, left/right and (3) disc trays 1~6. After that, disassemble as shown in the figure.
3. Remove the screws (B2)x 4 pcs.
4. Remove the tray motor and main cam motor.

Note:
The parts of (1), (2) and (3) correspond to the drawing Nos. 117, 102, 103 and 108 to 113 of the CD change mechanism disassembly drawing.
Remove the screws of 117, 102 and 103, and the parts of (1), (2) and (3) will be ready for removal and the screws of the tray motor and main cam motor will be visible.

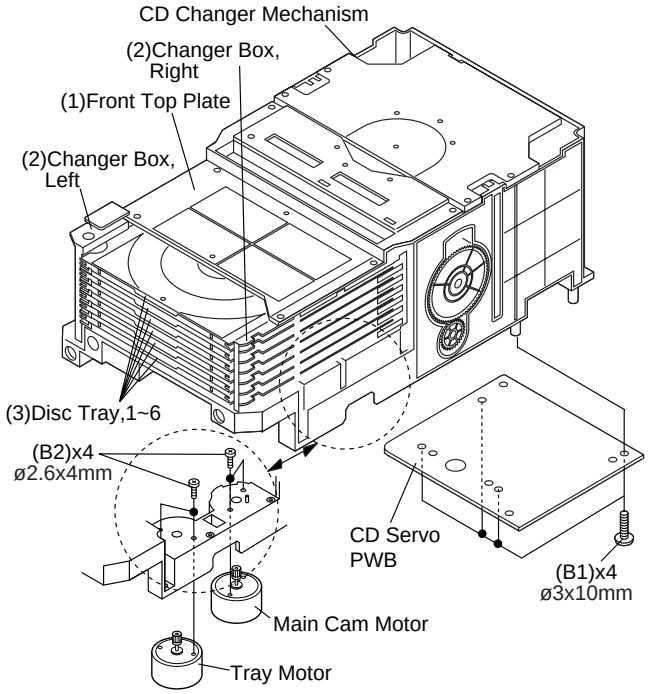


Figure 15-2

ADJUSTMENT

MECHANISM SECTION

• Driving Force Check

Torque Meter	Specified Value
Play: TW-2111	Tape 1: Over 80 g Tape 2: Over 80 g

• Torque Check

Torque Meter	Specified Value	
	Tape 1	Tape 2
Play: TW-2111	30 to 80 g.cm	30 to 80 g.cm
Fast forward: TW-2231	—	70 to 180 g.cm
Rewind: TW-2231	—	70 to 180 g.cm

• Tape Speed

	Test Tape	Adjusting Point	Specified Value	Instrument Connection
Normal speed	MTT-111	Variable Resistor in motor.	3,000 ± 30 Hz	Speaker Terminal (Load resistance: 6 ohms)

TAPE MECHANISM

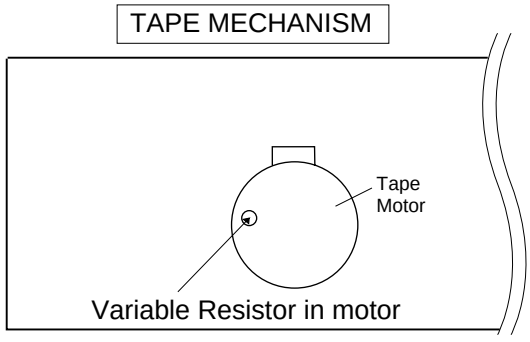


Figure 15-3

TUNER SECTION

fL: Low-range frequency
fH: High-range frequency

- **AM IF/RF**

Signal generator: 400 Hz, 30%, AM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Parts	Instrument Connection
AM IF	450 kHz	1,620 kHz	T351	*1
AM Band Coverage	—	522 kHz	(fL): T306 1.1 ± 0.1 V	*2
AM Tracking	990 kHz	990 kHz	(fL): T303	*1

*1. Input: Antenna Output: TP302
*2. Input: Antenna Output: TP301

- **FM**

Notes:

1: Description of the "FM IF Adjustment" is not carried on this Manual. It is because the IF coil in the FM front end section has been best adjusted in the factory so that its further adjustment is not needed at the field. When replacing the FM front end assembly, no adjustment is needed either.
2: The parts in the FM front end section are prepared in a complete unit, so you can't obtain each part individually.

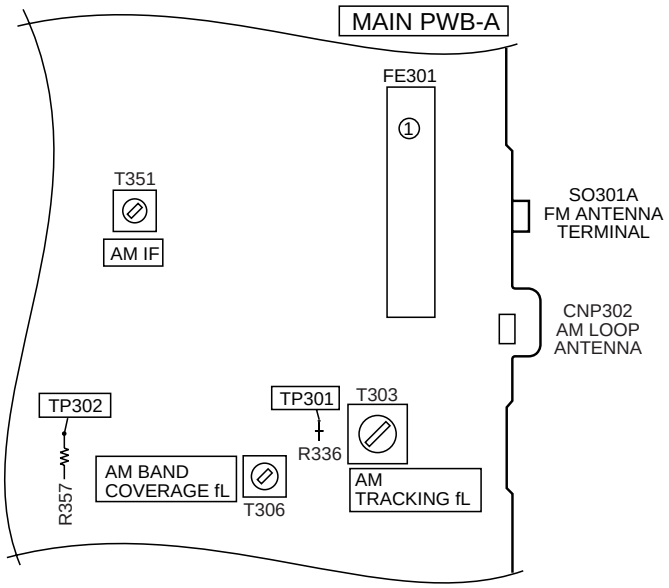


Figure 16-1 ADJUSTMENT POINTS

CD SECTION

- **Adjustment**

Since this CD system incorporates the following automatic adjustment functions, readjustment is not needed when replacing the pickup. Therefore, different PWBs and pickups can be combined freely.
Each time a disc is changed, these adjustments are performed automatically. Therefore, playback of each disc can be performed under optimum conditions.

Items adjusted automatically

(1) Offset adjustment (The offset voltage between the head amplifier output and the VREF reference voltage is compensated inside the IC.)
  * Focus offset adjustment
  * Tracking offset adjustment
(2) Tracking balance adjustment (waveform drawing Fig.16-2 EFBL)
(3) Gain adjustment (The gain is compensated inside the IC so that the loop gain at the gain crossover frequency will be 0 dB.)
  * Focus gain adjustment
  * Tracking gain adjustment

CD ERROR CODE DESCRIPTION

Error	State Code
	[Pickup Mechanism Error]
ER-CD00	Pickup mechanism error
ER-CD01	Pu-in SW detection NG
	[CD Changer Mechanism Error]
ER-CD10	Changer error
ER-CD11	Initial error
ER-CD20	Tray error

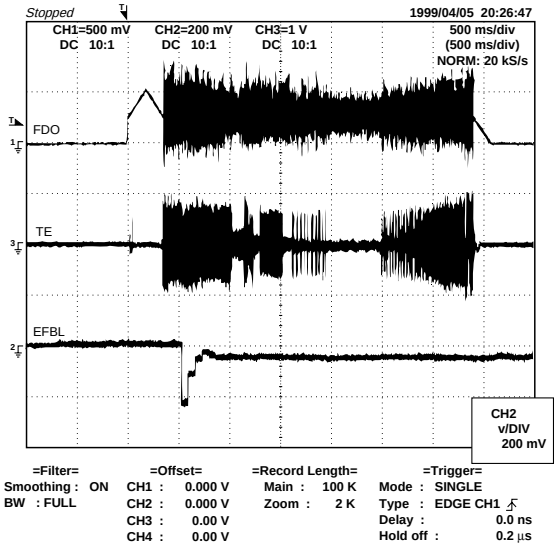


Figure 16-2

TEST MODE

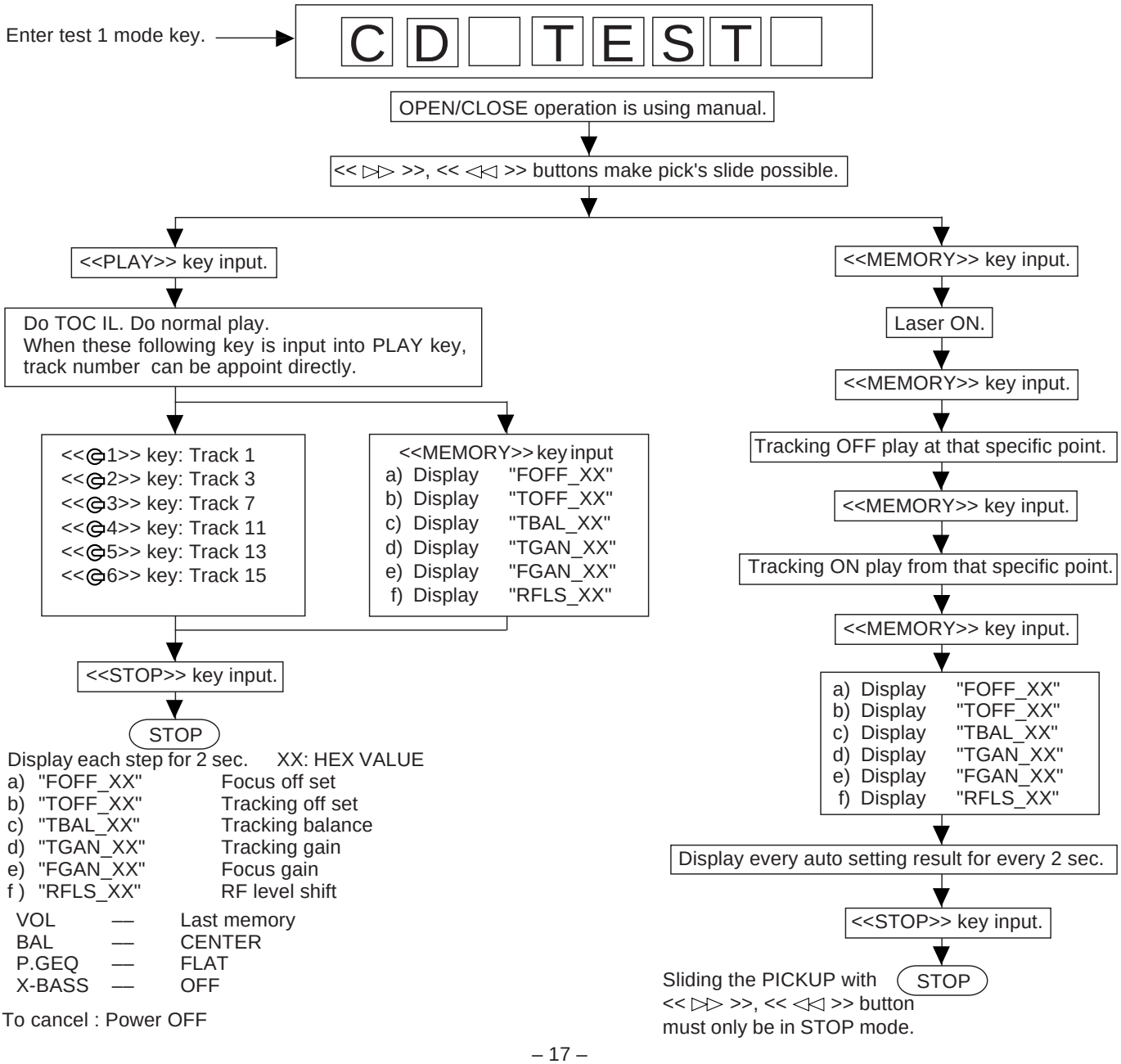
During POWER OFF mode, push below each 2 keys and [POWER] key. Then go to each Test Mode.

KEY	TEST MODE	CONTENTS
[CD] [X-BASS] + [POWER]	TEST 1	CD Test mode
[TAPE] [X-BASS] + [POWER]	TEST 2	Tape test mode
[TUNER] [X-BASS] + [POWER]	TEST 3	Tuner preset memory clear
[VIDEO/AUX] [X-BASS] + [POWER]	TEST 4	Tuner preset for production
[MEMORY/SET] [X-BASS] + [POWER]	TEST 5	All clear (reset)
[EQUALIZER] [X-BASS] + [POWER]	TEST 6	Audio test
[■] [DIMMER] + [POWER]	TEST 7	Key and display test
[TUN UP] [DIMMER] + [POWER]	TEST 8	RDS Test1
[TUN DOWN] [DIMMER] + [POWER]	TEST 9	RDS Test2
[◄◄] [CD] + [POWER]	TEST 10	CD Changer test
[►►] [CD] + [POWER]	TEST 11	Production initialize for changer
[EQUALIZER] [TUN UP] + [POWER]	TEST 12	Graphic equalizer test

CD TEST MODE

• Setting the test mode

Any one of test mode can be set by pressing several keys as follows.
<X-BASS> + <CD> + <POWER> TEST: CD operation test.


Enter test 1 mode key.
C D T E S T
OPEN/CLOSE operation is using manual.
<< ▷▷ >>, << ◁◁ >> buttons make pick's slide possible.
<<PLAY>> key input.
Do TOC IL. Do normal play.
When these following key is input into PLAY key, track number can be appoint directly.
<<1>> key: Track 1
<<2>> key: Track 3
<<3>> key: Track 7
<<4>> key: Track 11
<<5>> key: Track 13
<<6>> key: Track 15
<<MEMORY>> key input
a) Display "FOFF_XX"
b) Display "TOFF_XX"
c) Display "TBAL_XX"
d) Display "TGAN_XX"
e) Display "FGAN_XX"
f) Display "RFLS_XX"
<<STOP>> key input.
STOP
<<MEMORY>> key input.
Laser ON.
<<MEMORY>> key input.
Tracking OFF play at that specific point.
<<MEMORY>> key input.
Tracking ON play from that specific point.
<<MEMORY>> key input.
a) Display "FOFF_XX"
b) Display "TOFF_XX"
c) Display "TBAL_XX"
d) Display "TGAN_XX"
e) Display "FGAN_XX"
f) Display "RFLS_XX"
Display every auto setting result for every 2 sec.
<<STOP>> key input.
STOP
Sliding the PICKUP with << ▷▷ >>, << ◁◁ >> button must only be in STOP mode.

Display each step for 2 sec. XX: HEX VALUE

a) "FOFF_XX" Focus off set
b) "TOFF_XX" Tracking off set
c) "TBAL_XX" Tracking balance
d) "TGAN_XX" Tracking gain
e) "FGAN_XX" Focus gain
f) "RFLS_XX" RF level shift

VOL — Last memory
BAL — CENTER
P.GEQ — FLAT
X-BASS — OFF

To cancel : Power OFF

CD CHANGER MECHANISM MAIN BASE PARTS ASSEMBLING/ADJUSTING PROCEDURE

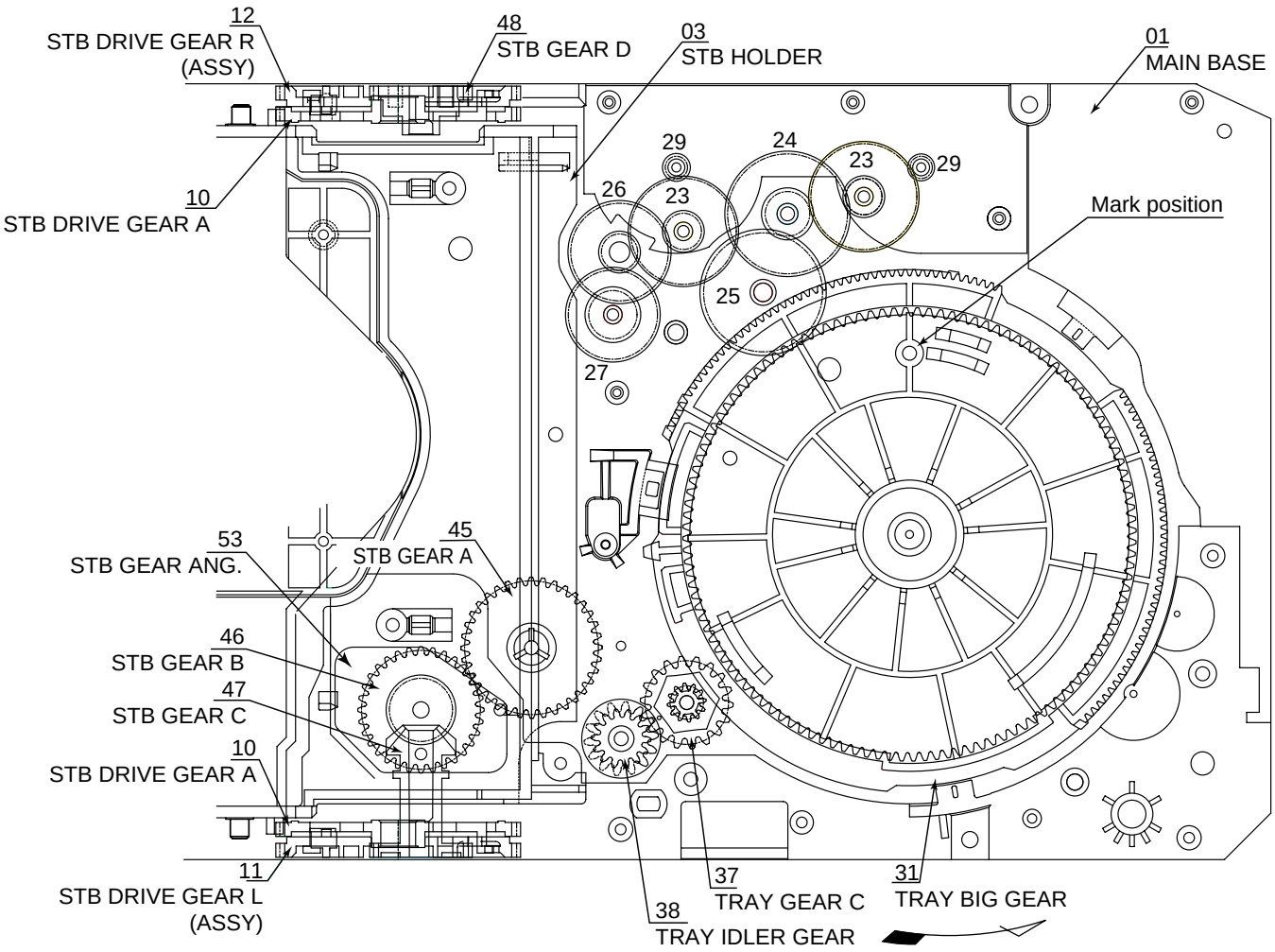
Work Content	Applied Part No.	Assembly Fig. No.	Remarks
1. Motor assembly (x 2) mounting (screw x 4)	01/29	Fig.19	
2. MT idle gear mounting (screw x 1)	25	Fig.19	
3. MT system gear assembly	23/24/26/27	Fig.19	
4. STB/tray drive system gear and others assembling/ mounting (screw x 3)	37/38/45/46 (53)/47/48	Fig.19	
5. Tray big gear assembly	31	Fig.19	Gear positioning
6. T.M SW PWB mounting (screw x 3)		Fig.20	
7. STB holder assembling	03	Fig.19	
8. STB drive gear L/R assembly mounting (screw x 2)	11 (10)/12 (10)	Fig.19	
9. Tray joint gear R/tray drive gear R assembling	34/36	Fig.20	Gear positioning
10. Tray gear A/B assembling	32/33	Fig.20	Gear positioning
11. Lift gear B/C assembling	43/44	Fig.21	Gear positioning
12. MT idler gear F assembling, mode big gear mounting (screw x 1)	28/42	Fig.21	
13. Change box R mounting (screw x 4)	04	Fig.21	
14. Lift gear A assembling	42	Fig.21	Gear positioning
15. Change box L assembly mounting (screw x 4)	02/30/35	Fig.22	
16. Lift cam assembling (shaft inserting)	44	Fig.22	Gear positioning
17. STB holder height adjusting		Fig.23	Check/adjustment
18. Top plate F/disc OB LEV. Mounting (screw x 6)	80	Fig.23	
19. Trays 1 - 6 assembling	91/92/93/94/95/96	Fig.24	
20. Top plate R mounting (screw x 6)		—	

CD CHANGER MECHANISM PARTS LIST

No.	Part Name
01 (101)	MAIN BASE
02 (102)	CHANGE BOX L
03 (147)	STB HOLDER
04 (103)	CHANGE BOX R
10 (119)	STB DRIVE GEAR A
11 (120)	STB DRIVE GEAR L
12 (122)	STB DRIVE GEAR R
20 (149)	STABILIZER FH
23 (141)	MT IDLER GEAR A
24 (138)	MT IDLER GEAR B
25 (137)	MT IDLER GEAR C
26 (140)	MT IDLER GEAR D
27 (139)	MT IDLER GEAR E
28 (131)	MT IDLER GEAR F
29 (MOB1,2)	MOTOR GEAR
30 (143)	TRAY DRIVE GEAR F
31 (134)	TRAY BIG GEAR
32 (135)	TRAY GEAR A
33 (136)	TRAY GEAR B
34 (124)	TRAY DRIVE GEAR R
35 (144)	TRAY JOINT GEAR F
36 (125)	TRAY JOINT GEAR R
37 (142)	TRAY GEAR C
38 (130)	TRAY IDLER GEAR

No.	Part Name
40 (115)	LIFT CAM
41 (126)	MODE BIG GEAR
42 (127)	LIFT GEAR A
43 (128)	LIFT GEAR B
44 (129)	LIFT GEAR C
45 (132)	STB GEAR A
46 (104)	STB GEAR B
47 (133-1)	STB GEAR C
48 (133-3)	STB GEAR D
50 (145)	LIFT LEVER
51 (106)	TRAY LOCK LEVER
52 (118)	DISC OB LEVER
53 (105)	STB GEAR ANG.
80 (117)	TOP PLATE F
81 (114)	TOP PLATE R
91 (108)	TRAY 1
92 (109)	TRAY 2
93 (110)	TRAY 3
94 (111)	TRAY 4
95 (112)	TRAY 5
96 (113)	TRAY 6

The number of ( ) is the number of the parts guide.



After assembling TRAY BIG GEAR, turn it in the arrow direction.

TRAY BIG GEAR ASSEMBLING POSITION

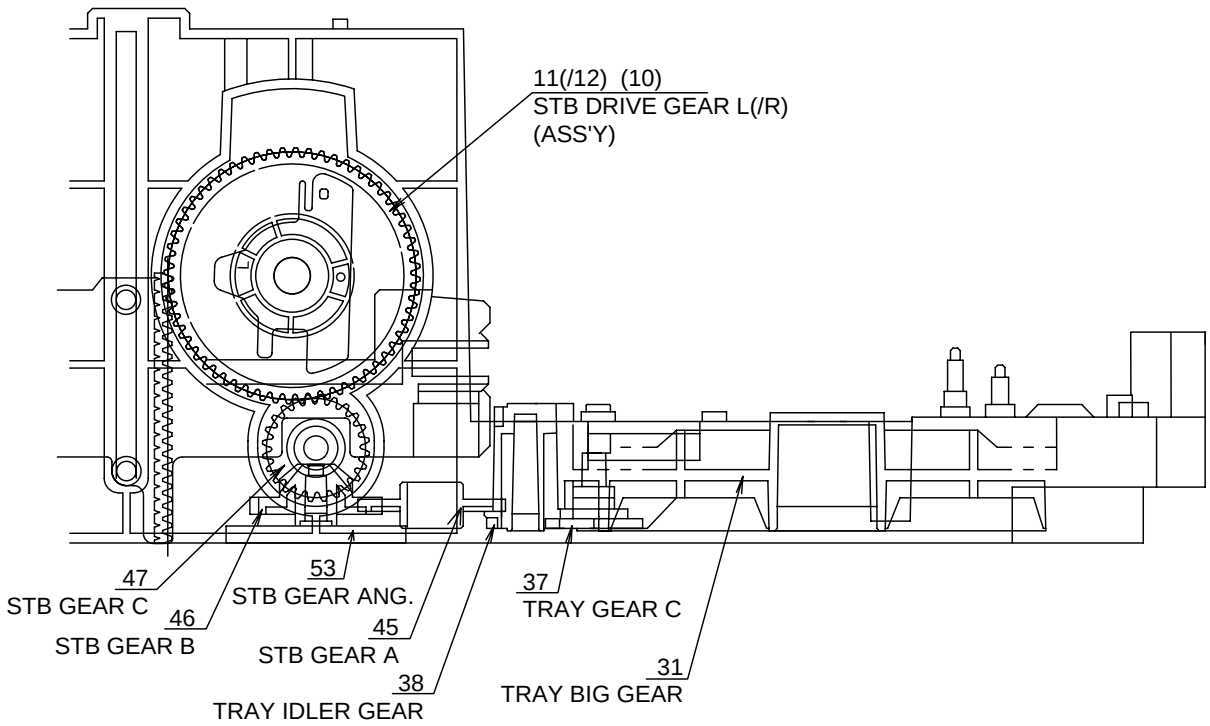
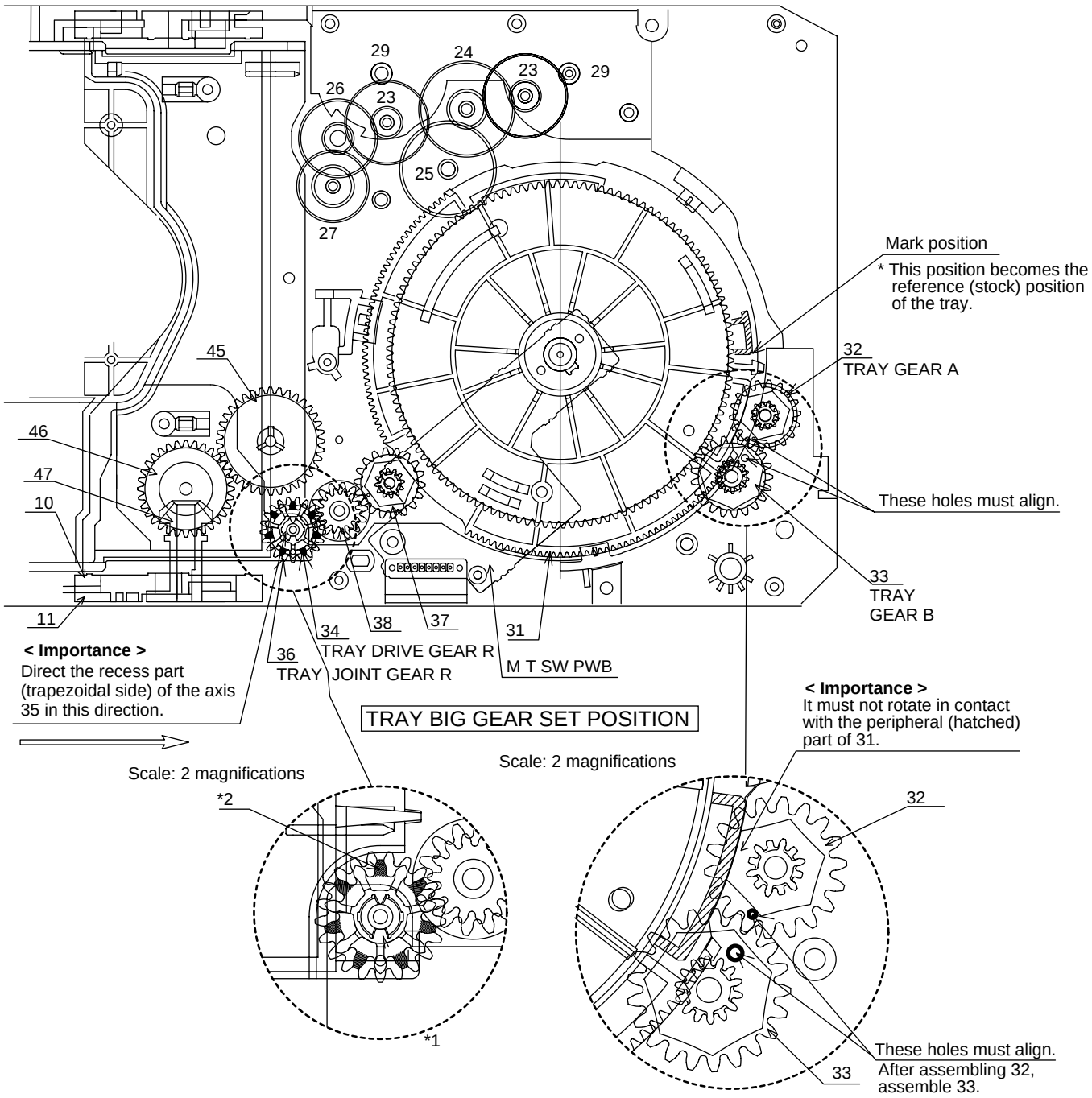
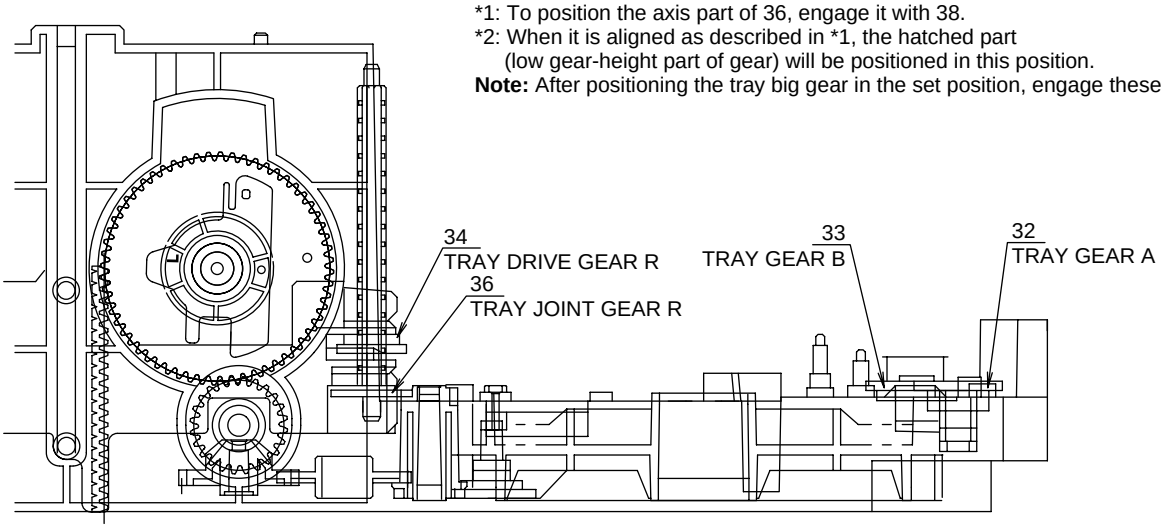


Figure 19





*1: To position the axis part of 36, engage it with 38.
*2: When it is aligned as described in *1, the hatched part (low gear-height part of gear) will be positioned in this position.
Note: After positioning the tray big gear in the set position, engage these gears.

Figure 20

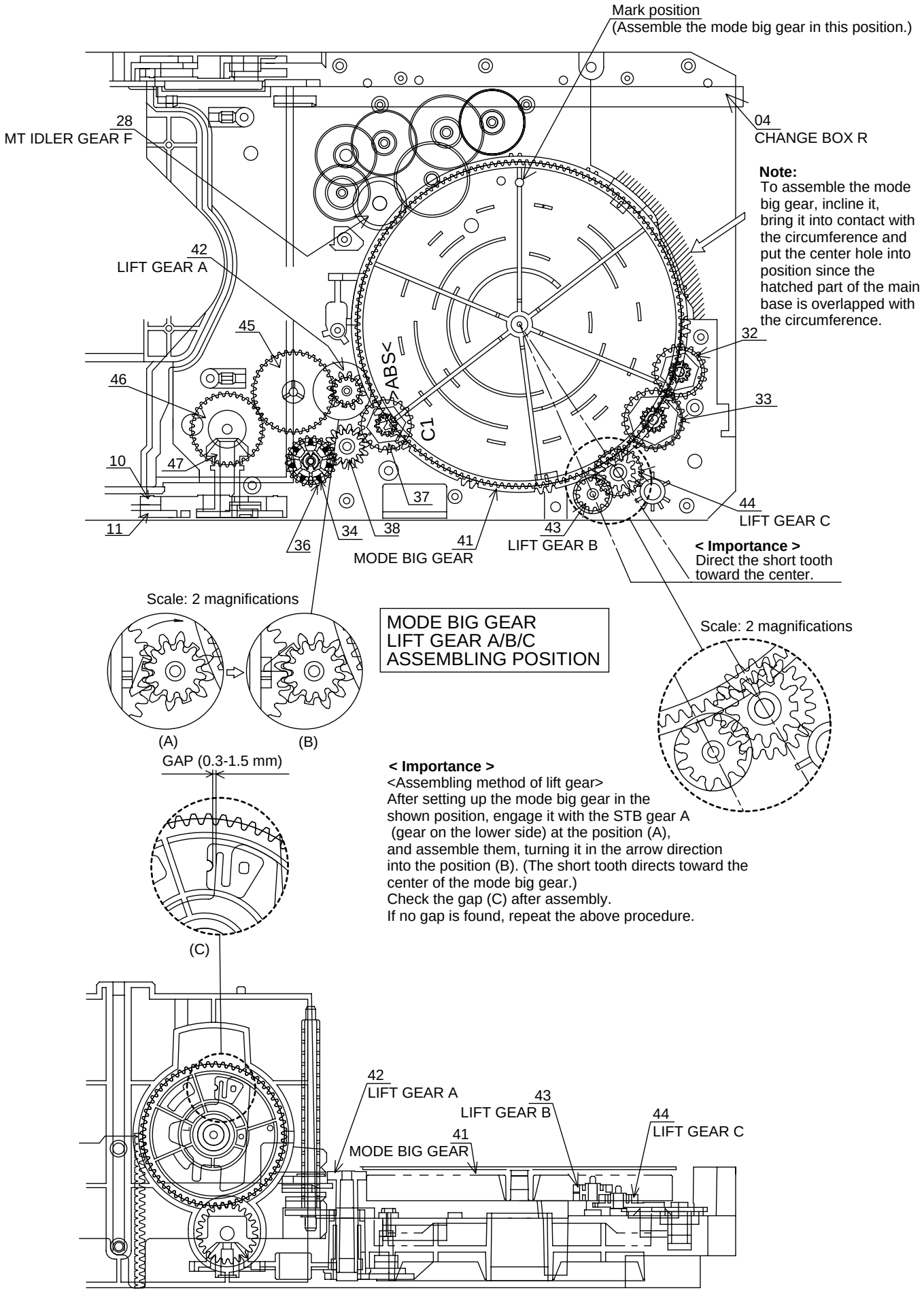
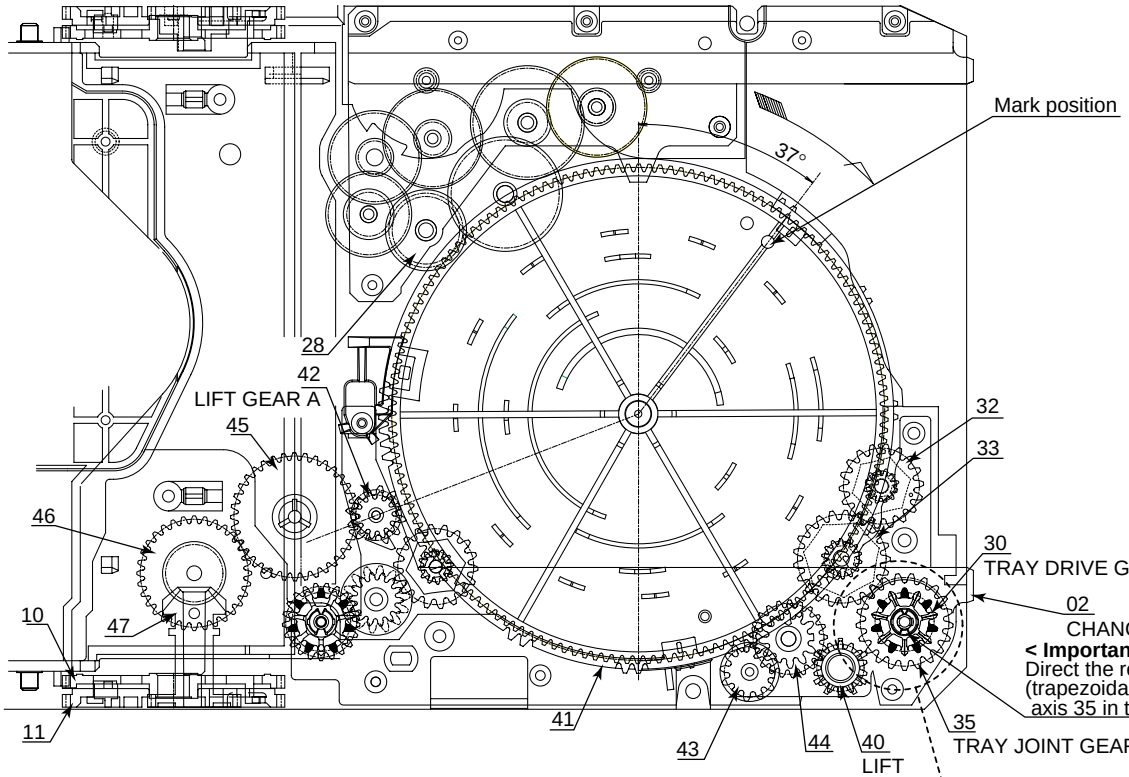

Mark position
(Assemble the mode big gear in this position.)
28
MT IDLER GEAR F
04
CHANGE BOX R
Note:
To assemble the mode big gear, incline it, bring it into contact with the circumference and put the center hole into position since the hatched part of the main base is overlapped with the circumference.
42
LIFT GEAR A
45
46
10
47
11
>ABS<
C1
32
33
37
34
38
36
41
MODE BIG GEAR
43
LIFT GEAR B
44
LIFT GEAR C
< Importance >
Direct the short tooth toward the center.
Scale: 2 magnifications
MODE BIG GEAR
LIFT GEAR A/B/C
ASSEMBLING POSITION
Scale: 2 magnifications
(A)
(B)
GAP (0.3-1.5 mm)
(C)
< Importance >
<Assembling method of lift gear>
After setting up the mode big gear in the shown position, engage it with the STB gear A (gear on the lower side) at the position (A), and assemble them, turning it in the arrow direction into the position (B). (The short tooth directs toward the center of the mode big gear.)
Check the gap (C) after assembly.
If no gap is found, repeat the above procedure.
42
LIFT GEAR A
43
LIFT GEAR B
44
LIFT GEAR C
41
MODE BIG GEAR

Figure 21



TRAY JOINT GEAR F
(CHANGE BOX L ASS'Y) ASSEMBLING POSITION
LIFT CAM

Assembling procedure

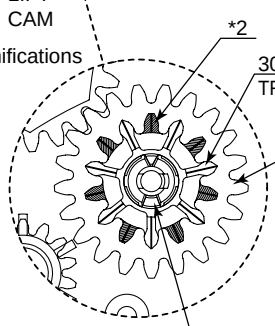
1. Turn the mode big gear approx. 37 degrees in the arrow direction.
2. Assemble the change box L ass'y.

Note: At this time, the tray joint gear F must be located in the position shown in figure. Moreover, the gear must be engaged securely.

3. After assembly, return the mode big gear to the initial position.
4. Assemble the lift cam.

Note: At this time, the lift cam (No.40) must be located in the position shown in figure 22.

Scale: 2 magnifications



*1: To position the axis part of 35, engage it with 33.

*2: When it is aligned as described in *1, the hatched part (low gear-height part of gear) will be positioned as shown.

Since this gear engagement is not visually checked, verify that it does not float when the gear box L is installed.

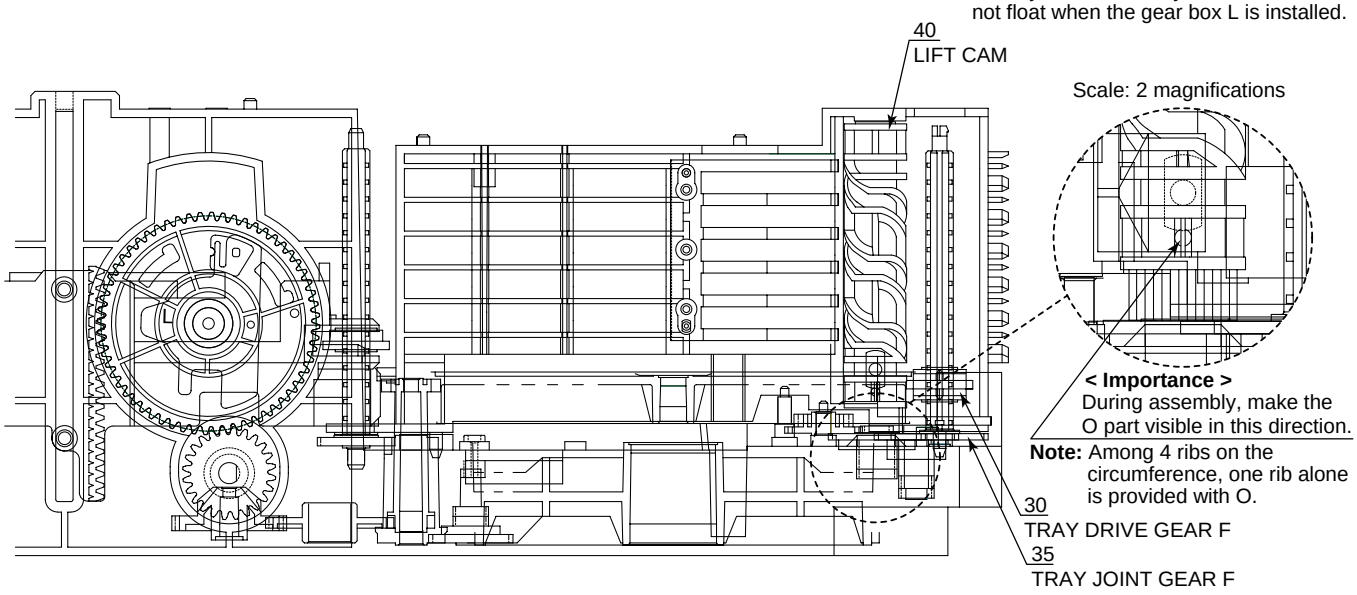
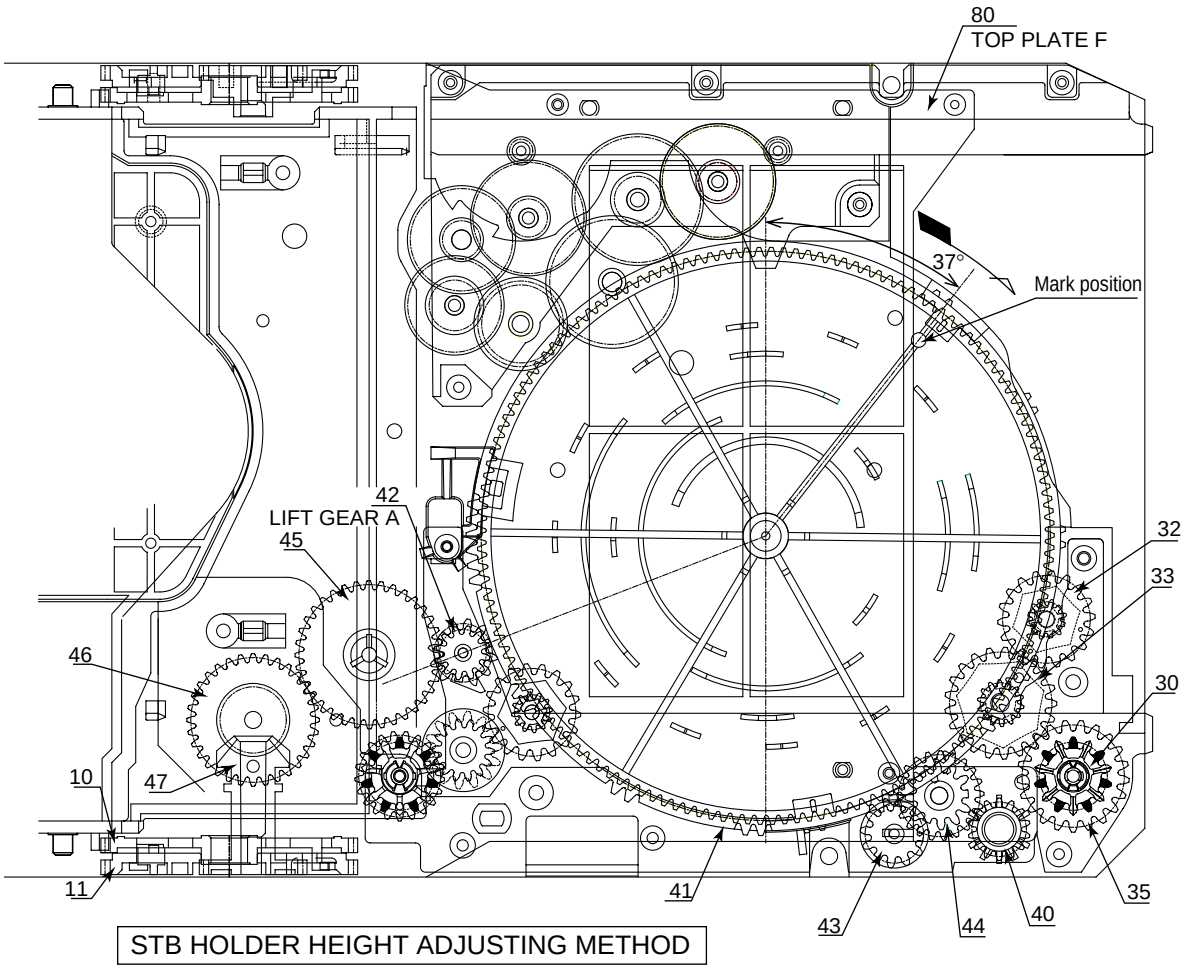


Figure 22

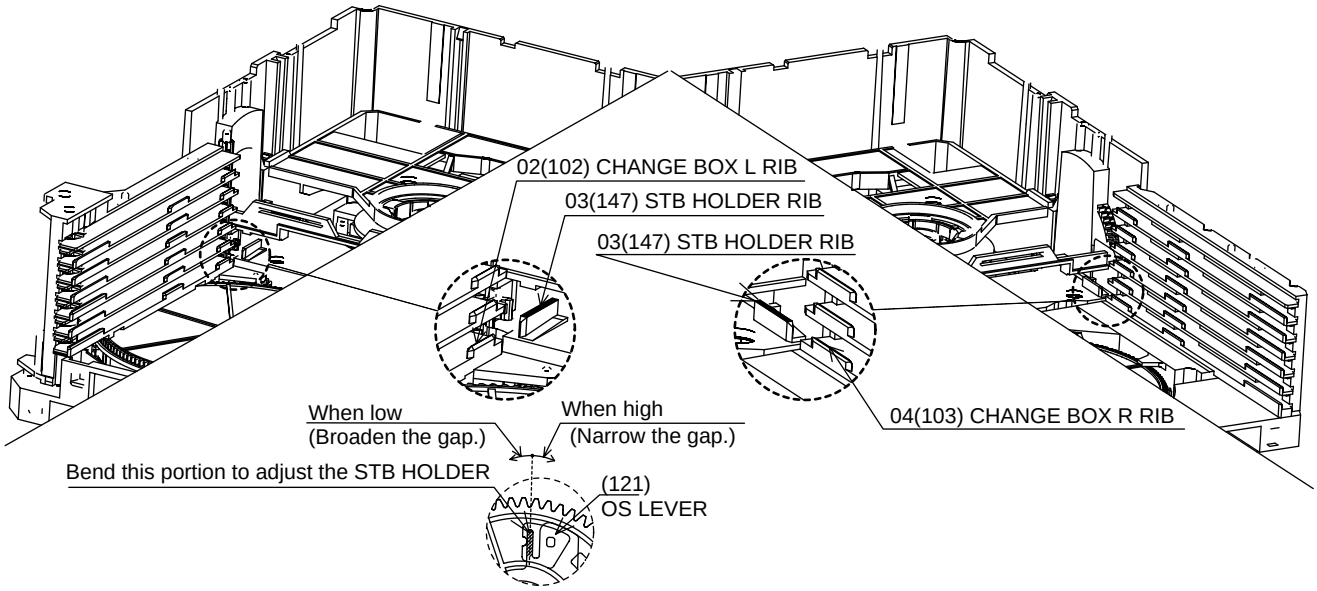


STB HOLDER HEIGHT ADJUSTING METHOD

Adjusting procedure

1. Turn the mode big gear approx. 37 degrees in the arrow direction.
2. Viewing from the front side of the mechanism, verify that the guide ribs (CHANGE BOX L/R and STB HOLDER)of tray are as tall as each other.
3. If they are not, bend the lever for adjustment. (Refer to the details.)

Note: Also apply the same adjustment on the R side.



Adjustment procedure

1. Rotate the MODE BIG GEAR by 37° in the arrowed direction.
2. Check that the guide ribs (CHANGE BOX L/R and STB HOLDER) on the arrowed TRAY are at the same height when looked from the front.
3. If they are not, bend the OS LEVER to adjust them. (Refer to the detail drawing.)

Note: Adjust the R portion in the same procedure.

Figure 23

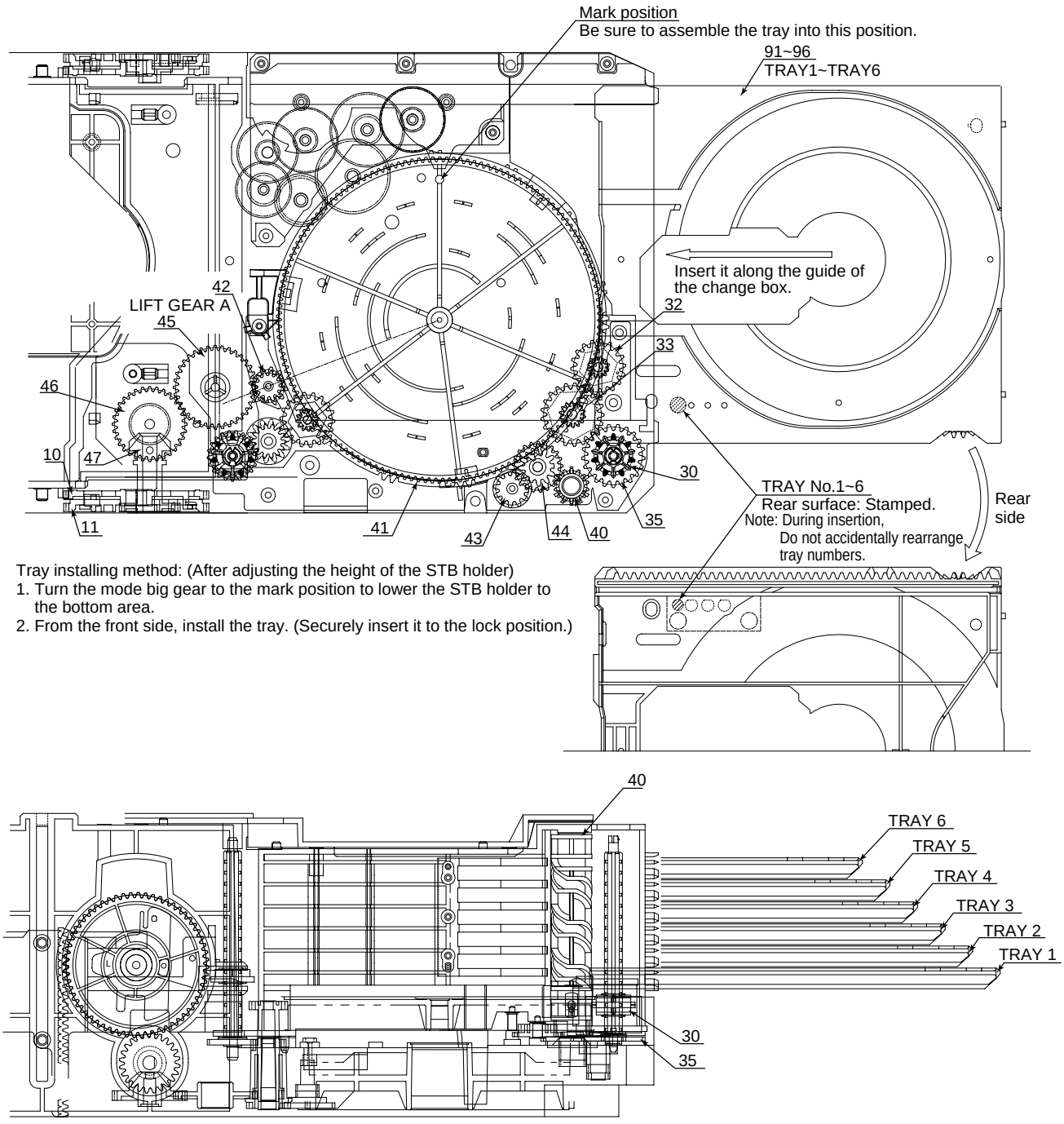


Figure 24

Measure to be taken when a disc cannot be removed due to a mechanism trouble

First, remove the mechanism unit section from the set, and check for the state of the disc.
(Remove the top plate R if necessary.)

<**State of the disc**>

(1) When the disc is in the normal PLAY (chucking) position → Try to eject the disc by turning the mode big gear/tray big gear manually.
* At this time, be sure to adjust the tray's position (height).

(2) When the disc is in the normal STOCK position → Try to eject the disc by turning the tray big gear manually.
* At this time, be sure to adjust the tray's position (height).

(3) When the disc is not in the normal position → The tray or disc is not in the normal position.
(The tray or disc may catch somewhere.)
↓
Remove the TOP PLATE F/DISC OB lever.
Unlock the tray lock lever and pull out the tray which is not caught.
Move the caught tray or disc and remove the disc.

In case of (1) and (2), the mechanism is normal (defective circuit parts, etc.). However, it may stop somewhere.
This is the reason why you should try to turn the tray big gear first.
In case of (3), either of the big gears does not turn.

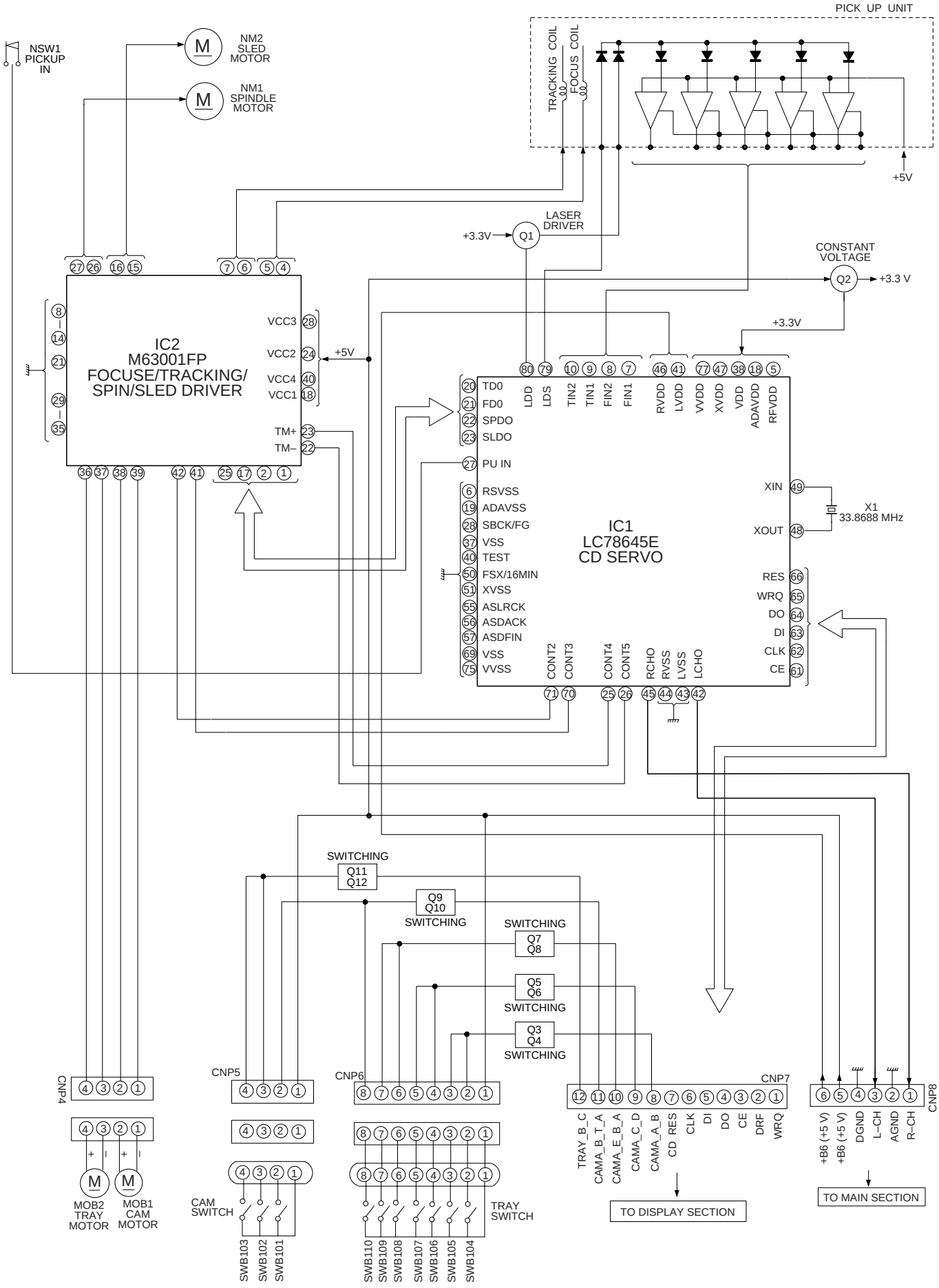


Figure 25 BLOCK DIAGRAM (1/3)

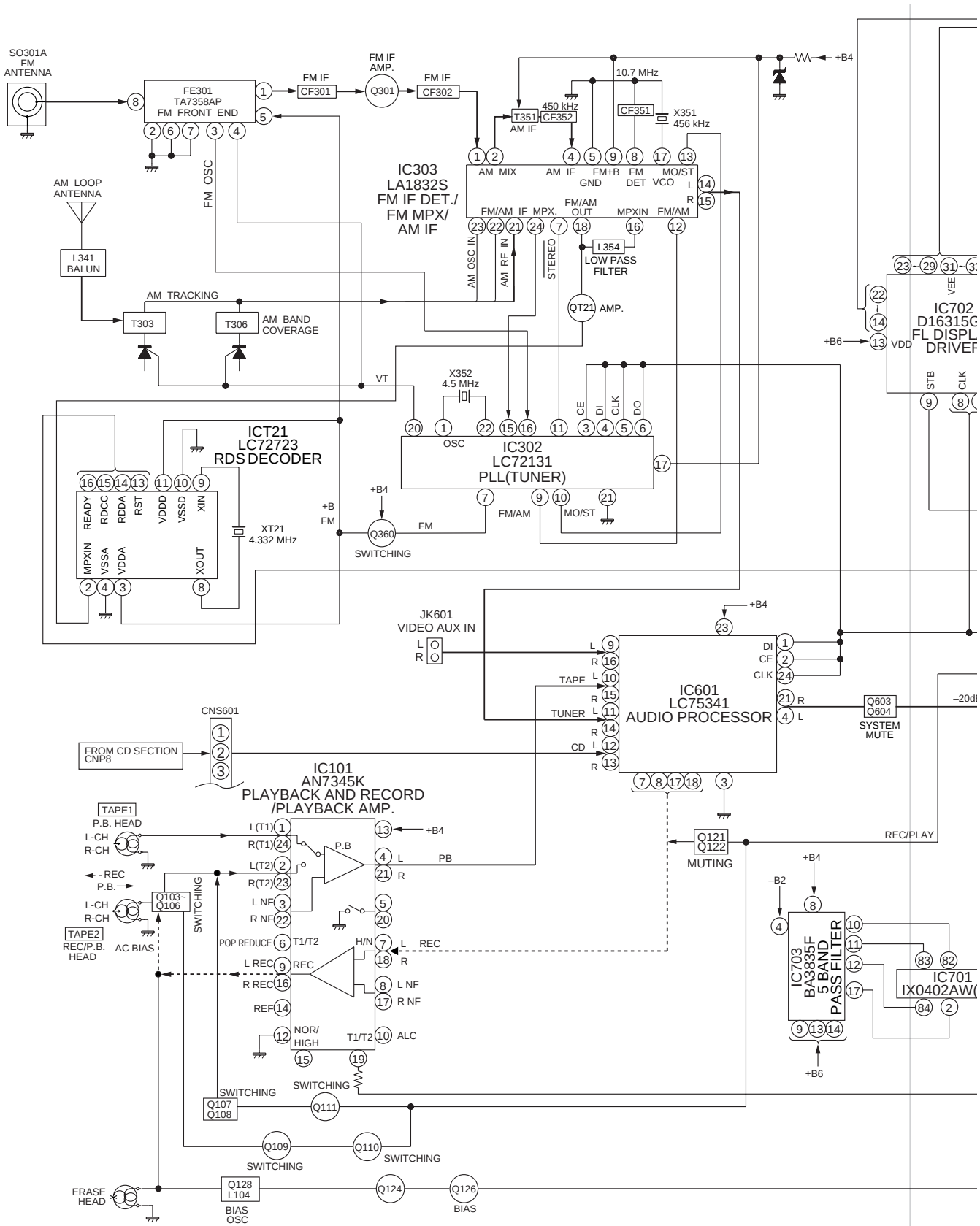


Figure 26 BLOCK DIAGRAM (2/3)

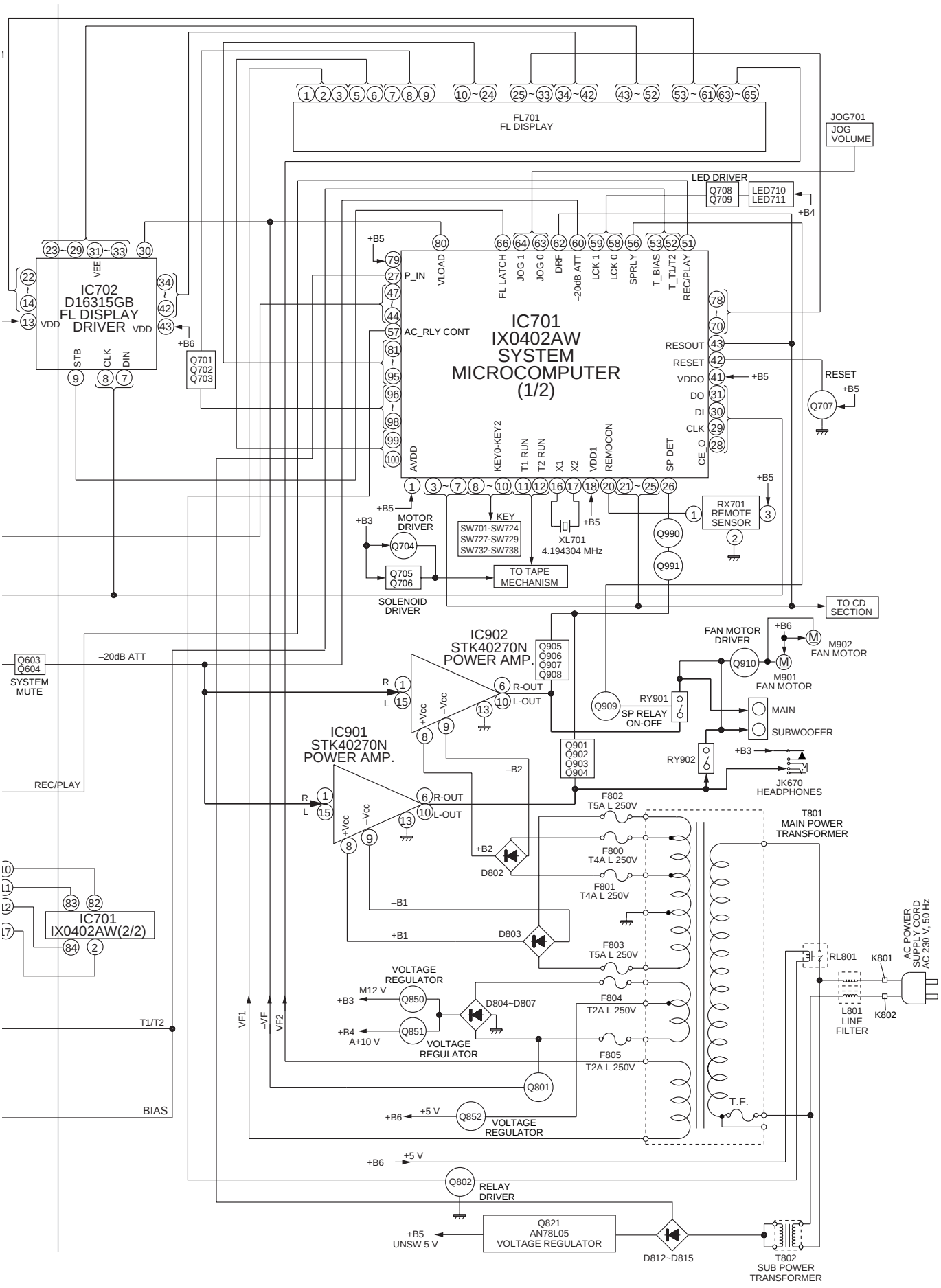
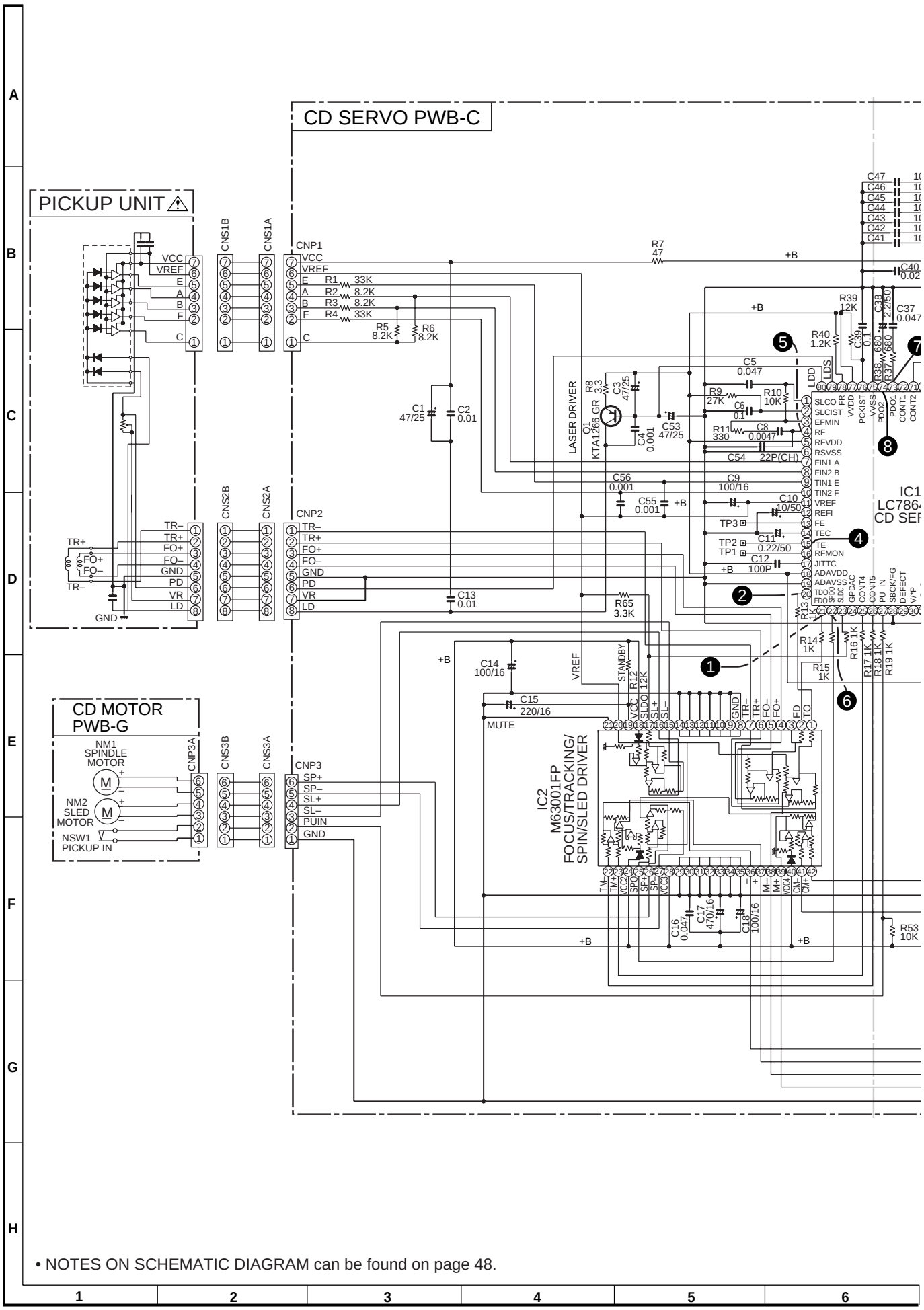
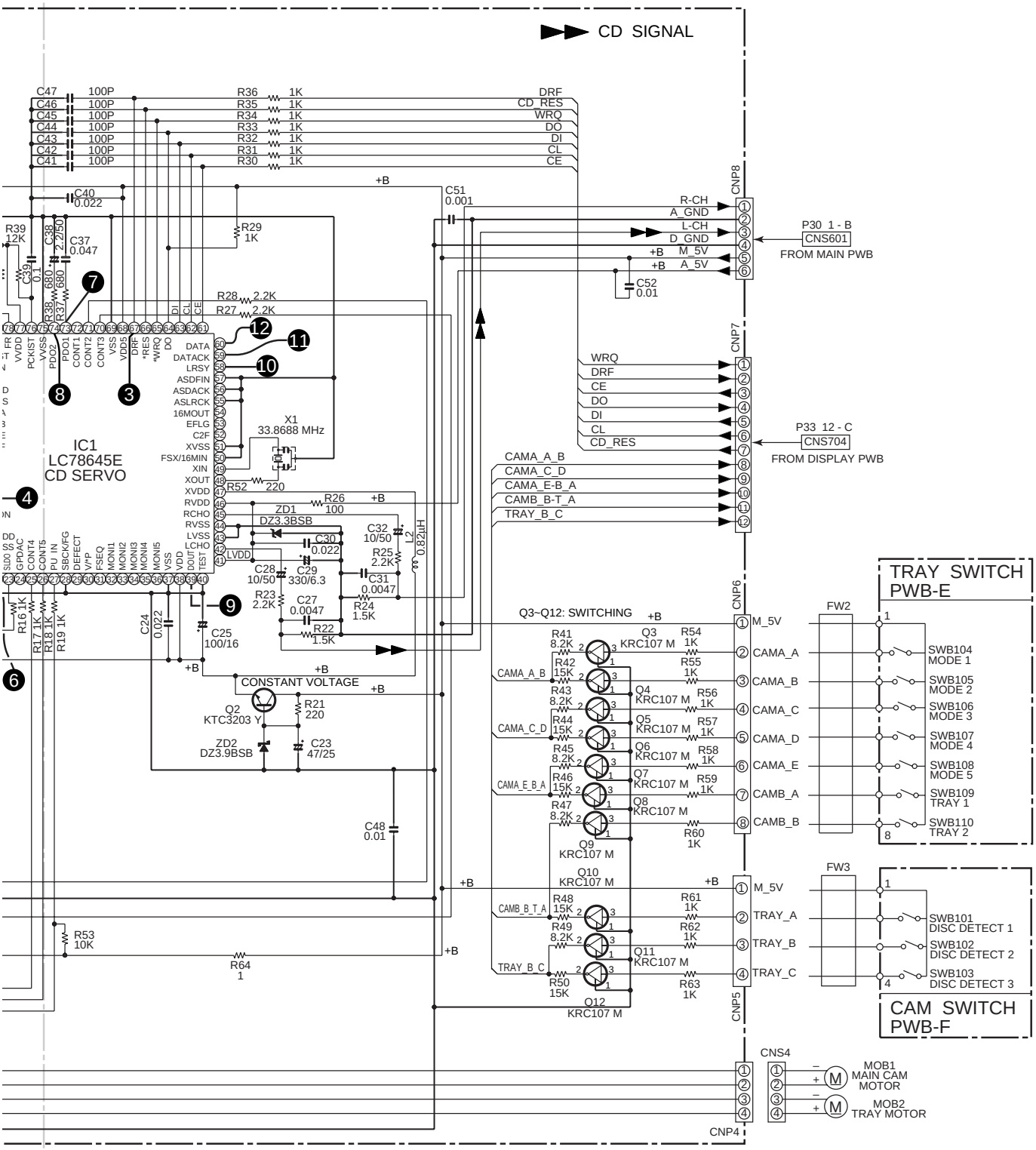


Figure 27 BLOCK DIAGRAM (3/3)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 48.

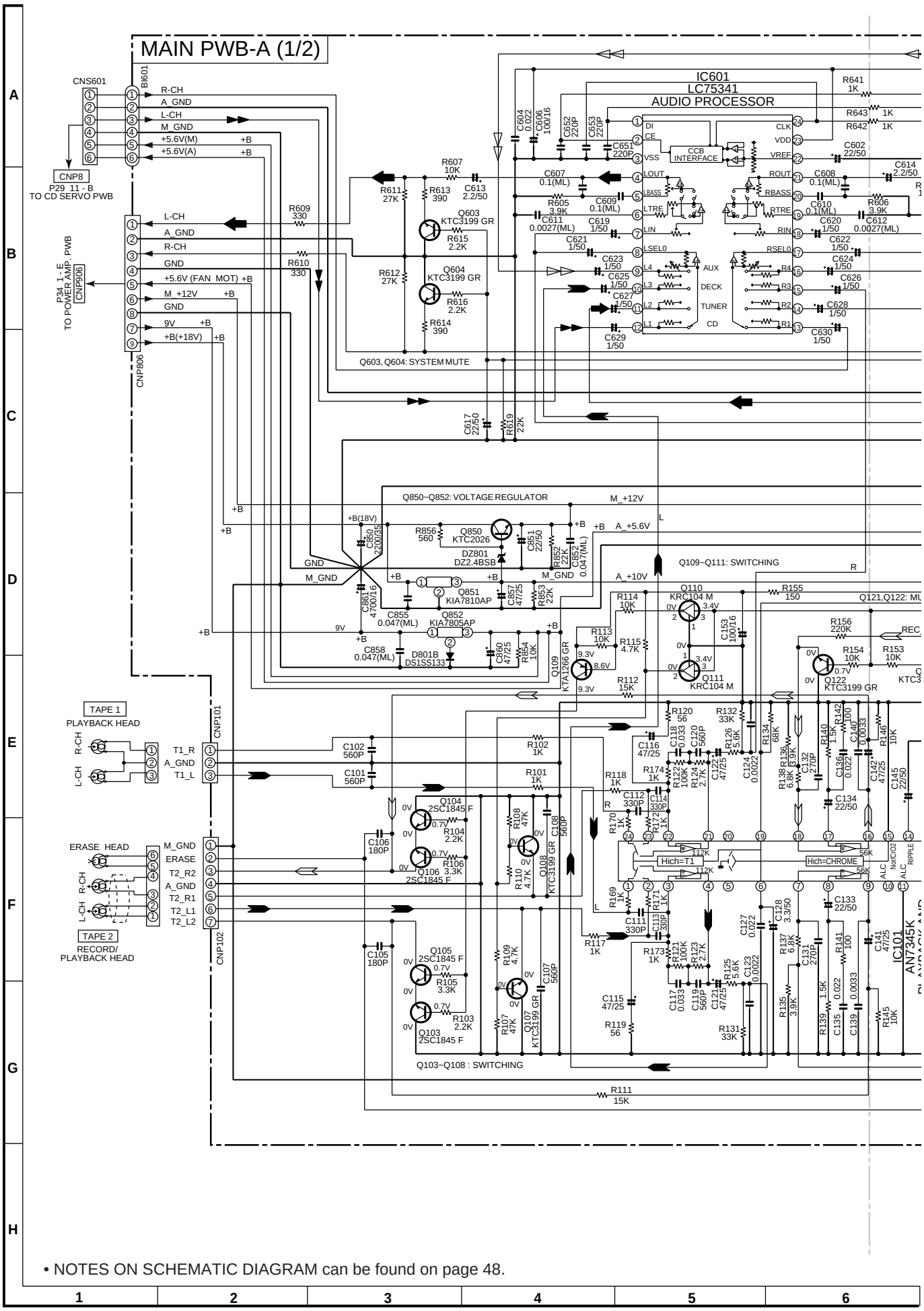
Figure 28 SCHEMATIC DIAGRAM (1/10)



• The numbers 1 to 12 are waveform numbers shown in page 49.

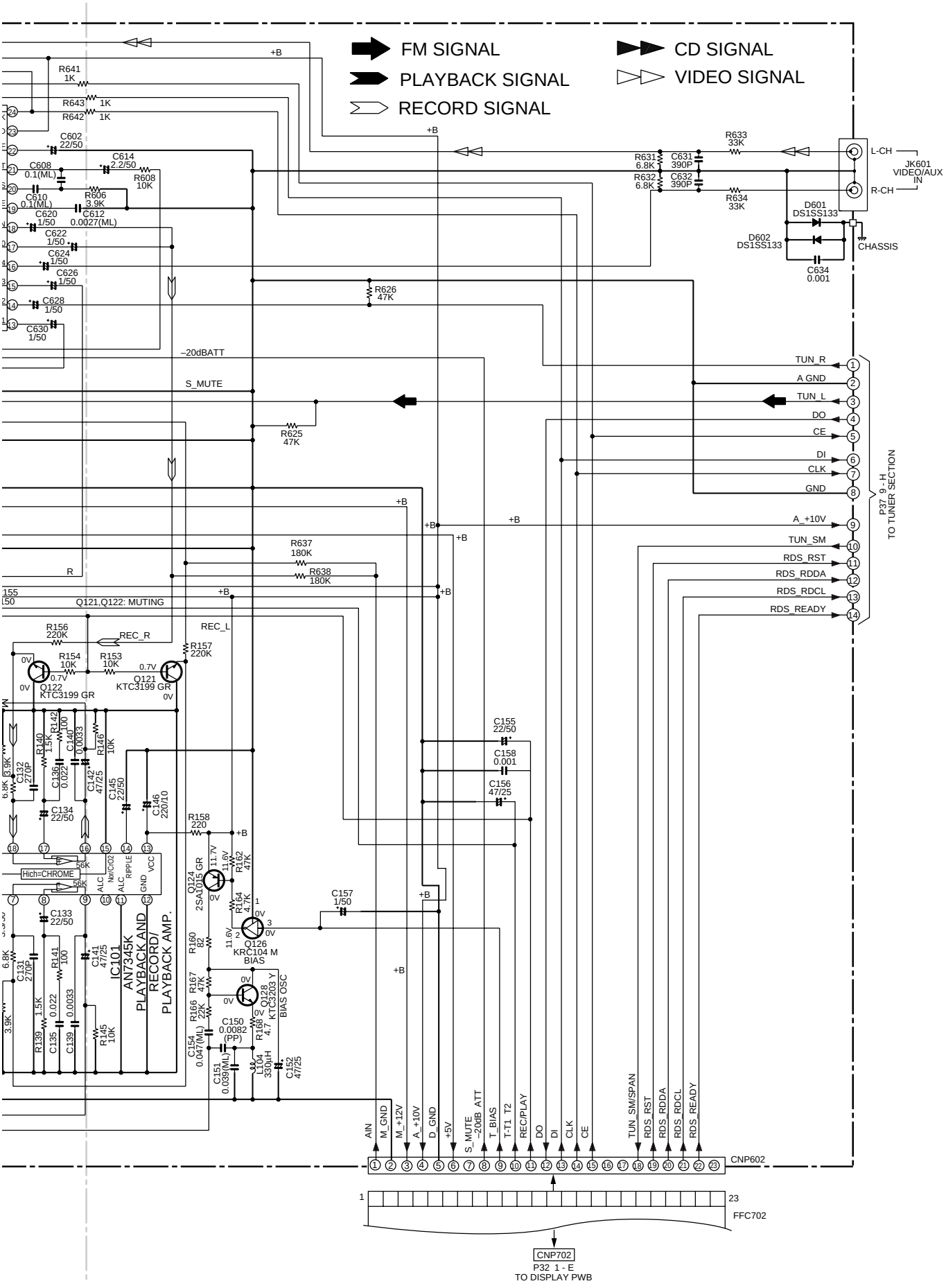
7	8	9	10	11	12

Figure 29 SCHEMATIC DIAGRAM (2/10)



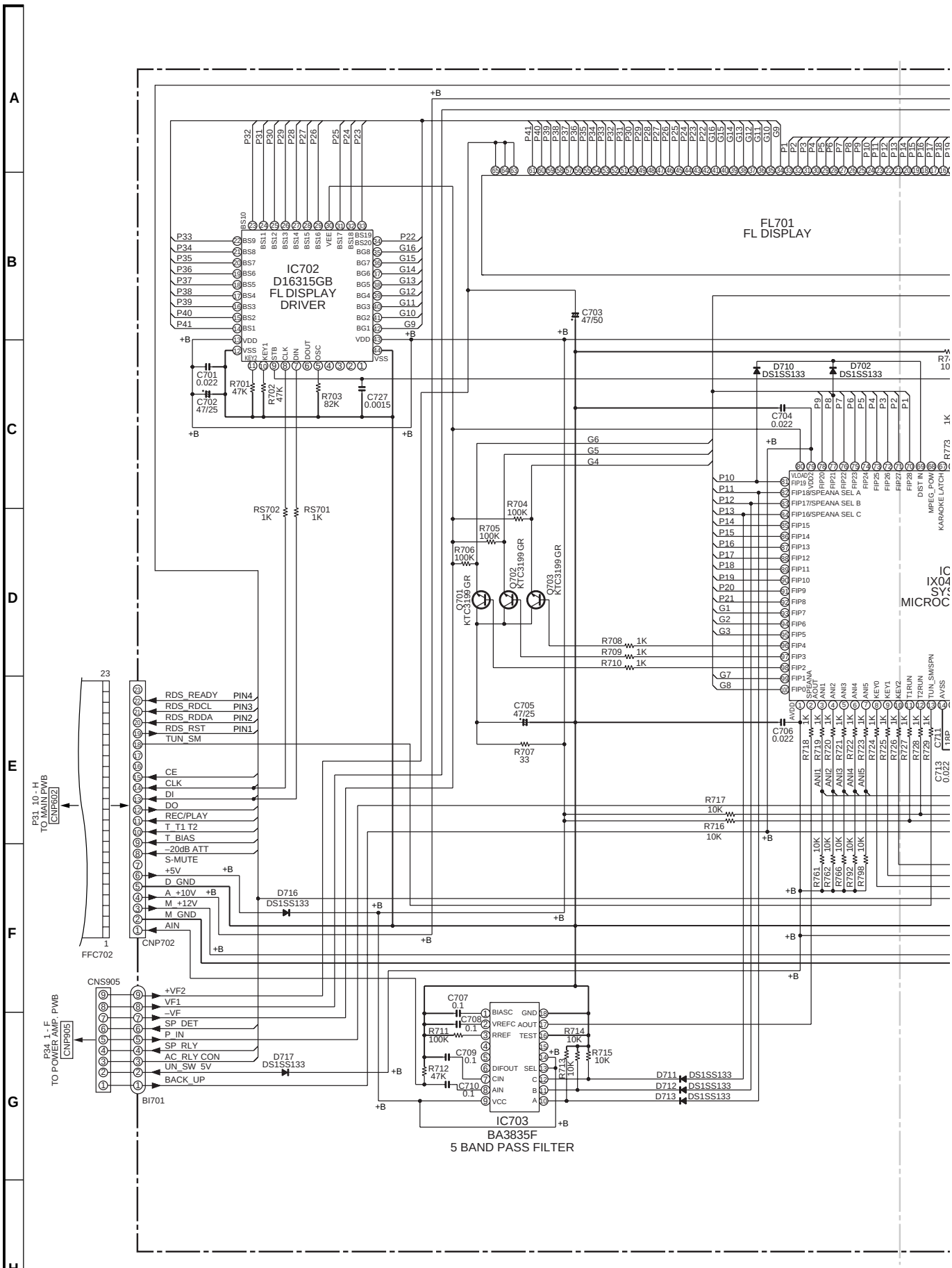
• NOTES ON SCHEMATIC DIAGRAM can be found on page 48.

Figure 30 SCHEMATIC DIAGRAM (3/10)



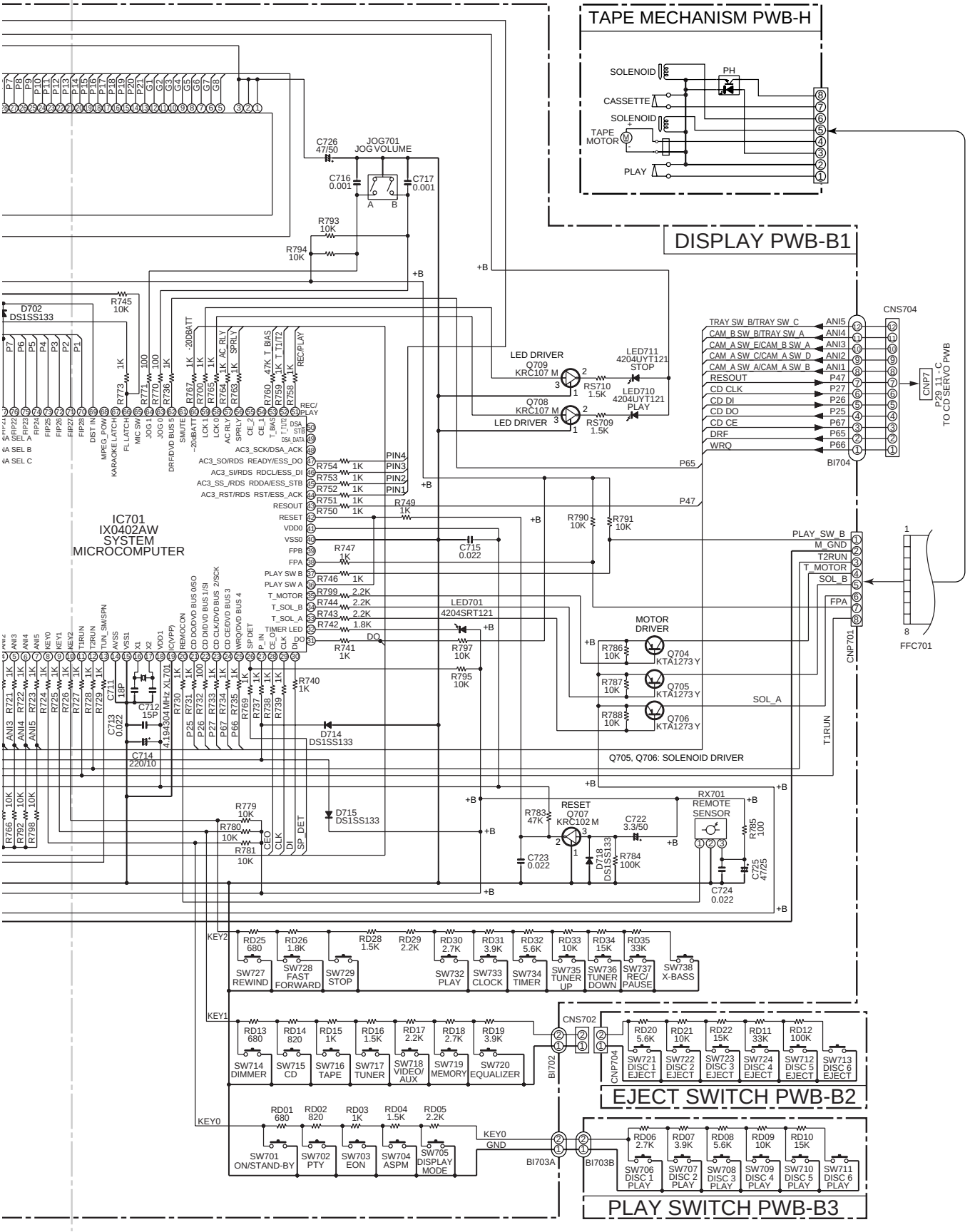
7	8	9	10	11	12

Figure 31 SCHEMATIC DIAGRAM (4/10)



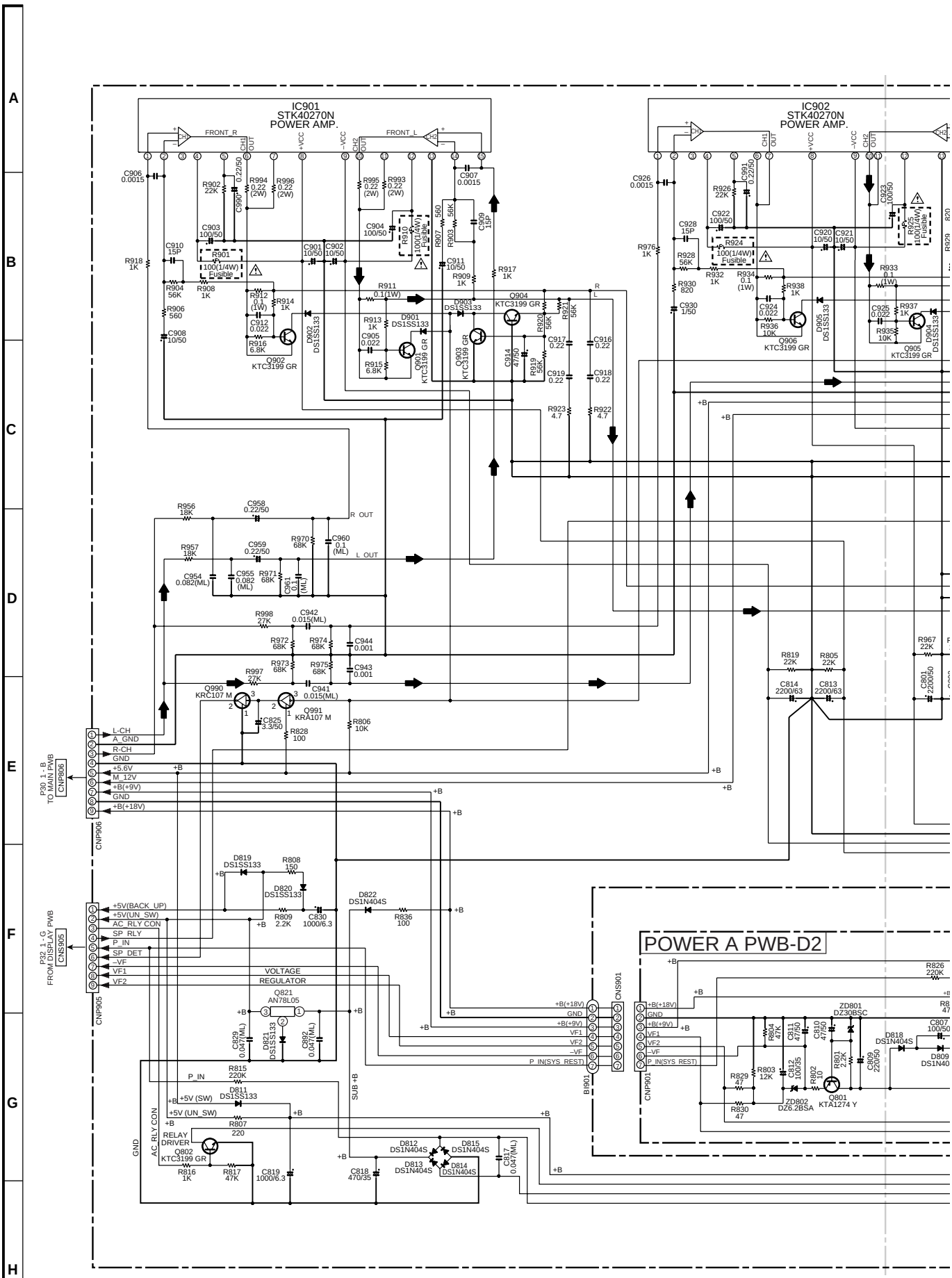
• NOTES ON SCHEMATIC DIAGRAM can be found on page 48.

Figure 32 SCHEMATIC DIAGRAM (5/10)



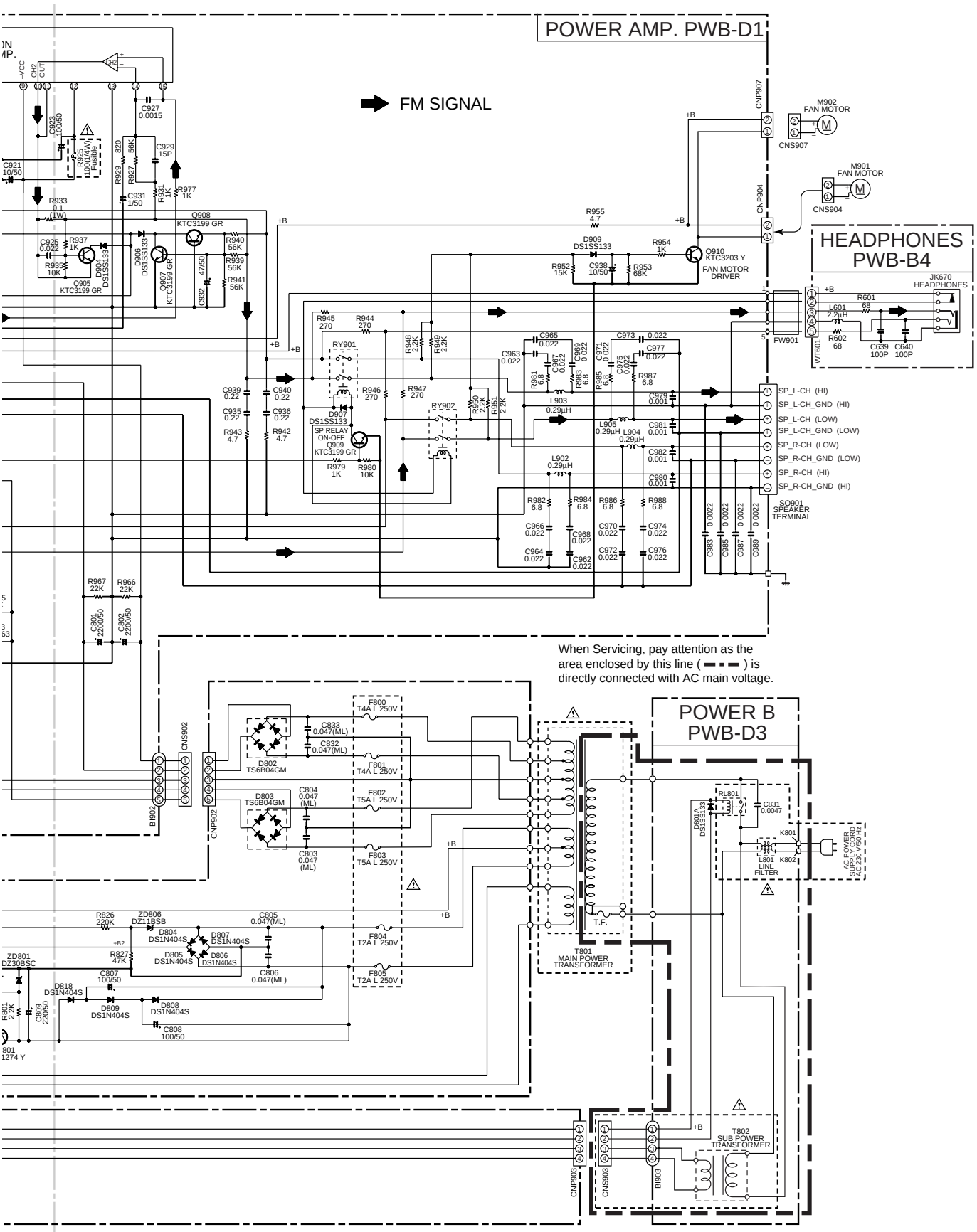
7	8	9	10	11	12

Figure 33 SCHEMATIC DIAGRAM (6/10)



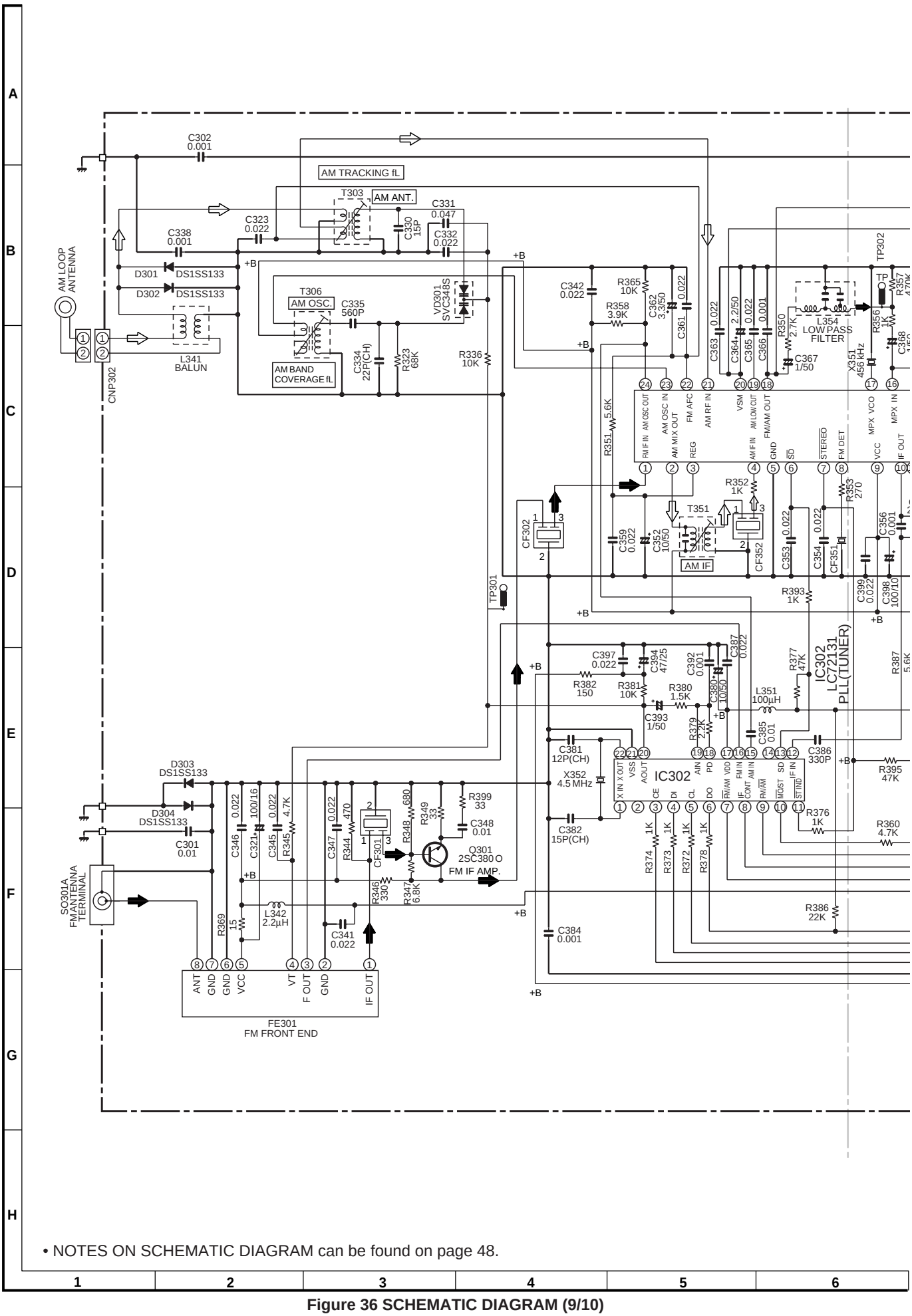
• NOTES ON SCHEMATIC DIAGRAM can be found on page 48.

Figure 34 SCHEMATIC DIAGRAM (7/10)



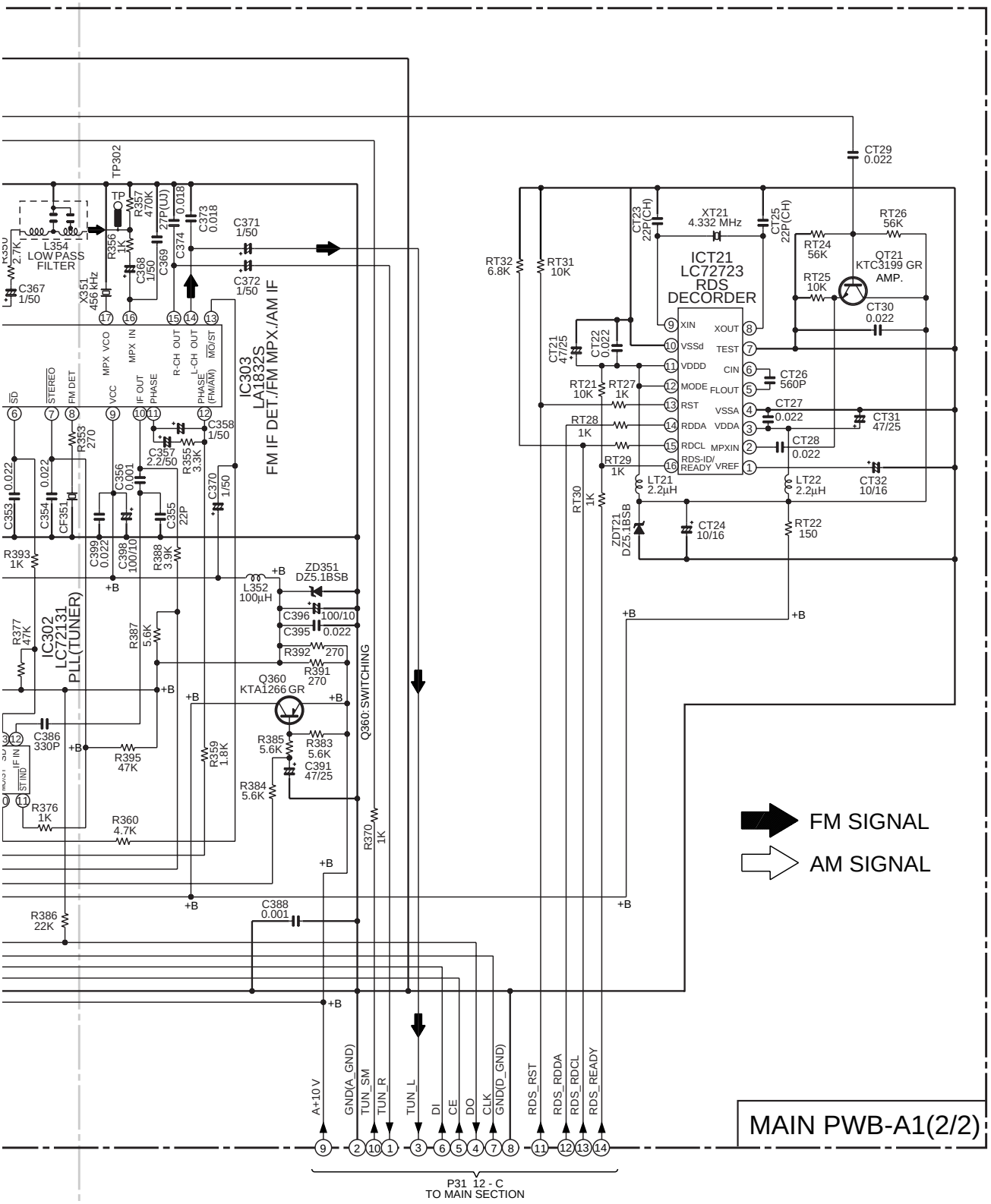
7	8	9	10	11	12

Figure 35 SCHEMATIC DIAGRAM (8/10)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 48.

Figure 36 SCHEMATIC DIAGRAM (9/10)



7	8	9	10	11	12

Figure 37 SCHEMATIC DIAGRAM (10/10)

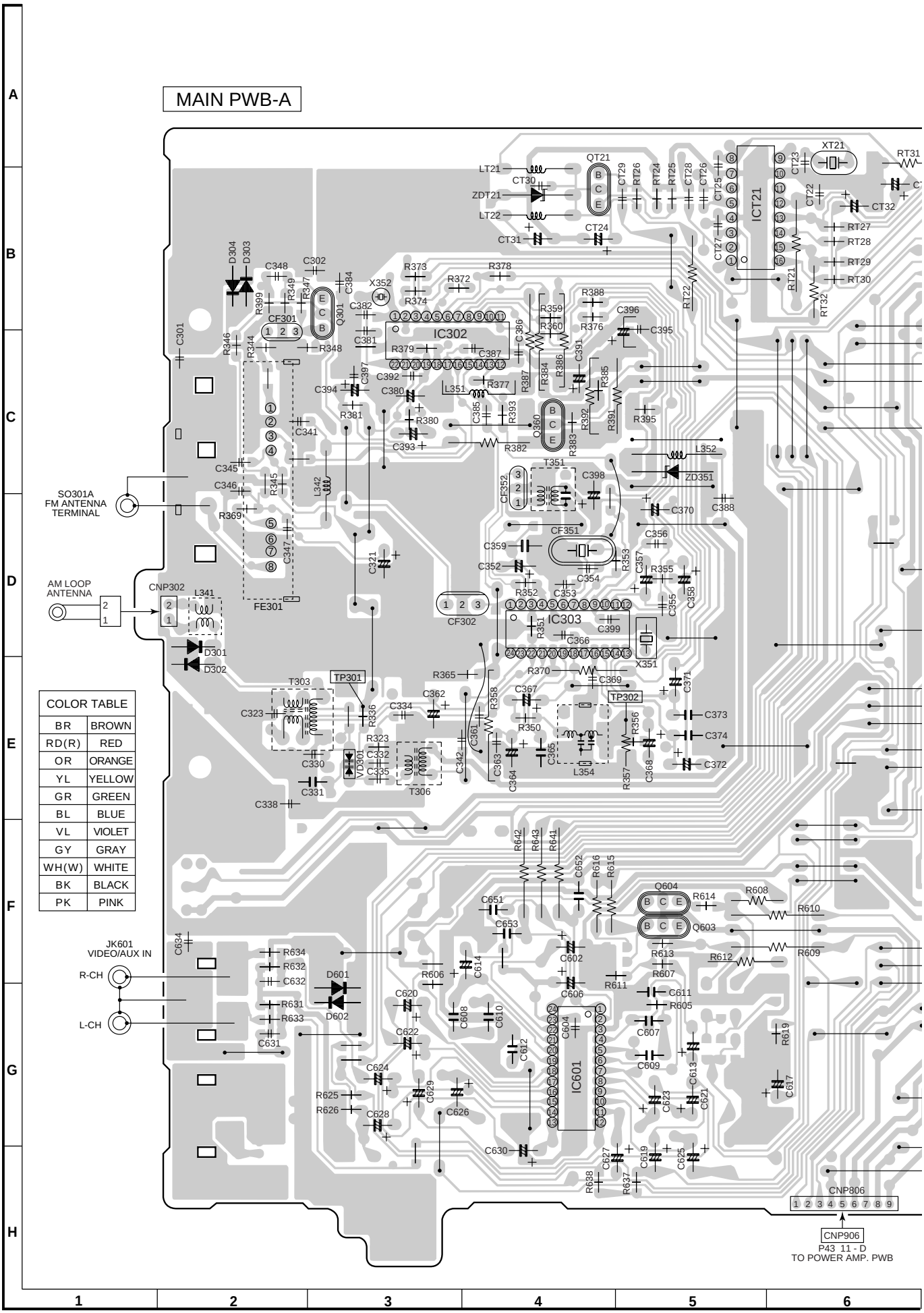
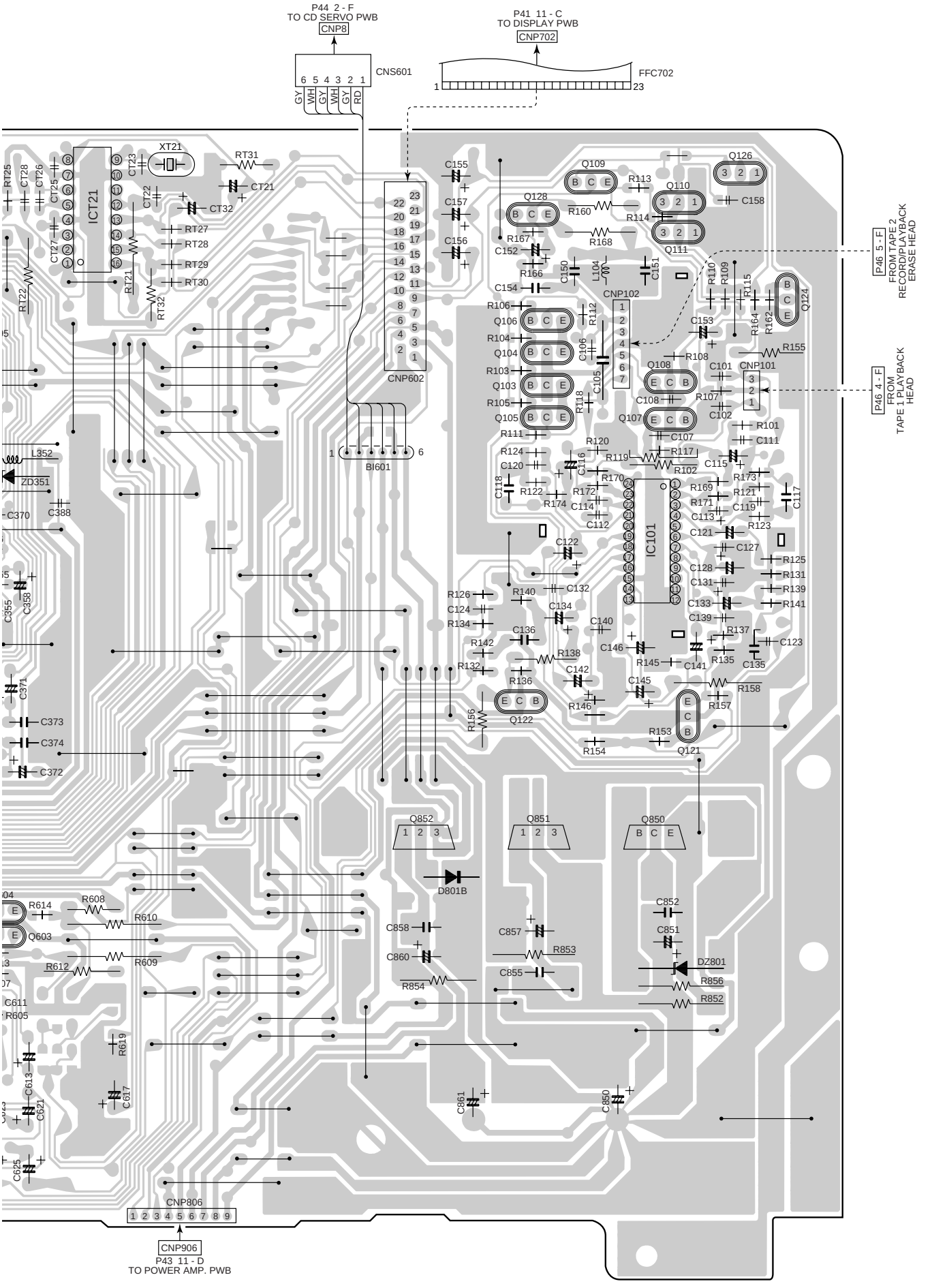


Figure 38 WIRING SIDE OF P.W.BOARD (1/9)



7	8	9	10	11	12

Figure 39 WIRING SIDE OF P.W.BOARD (2/9)

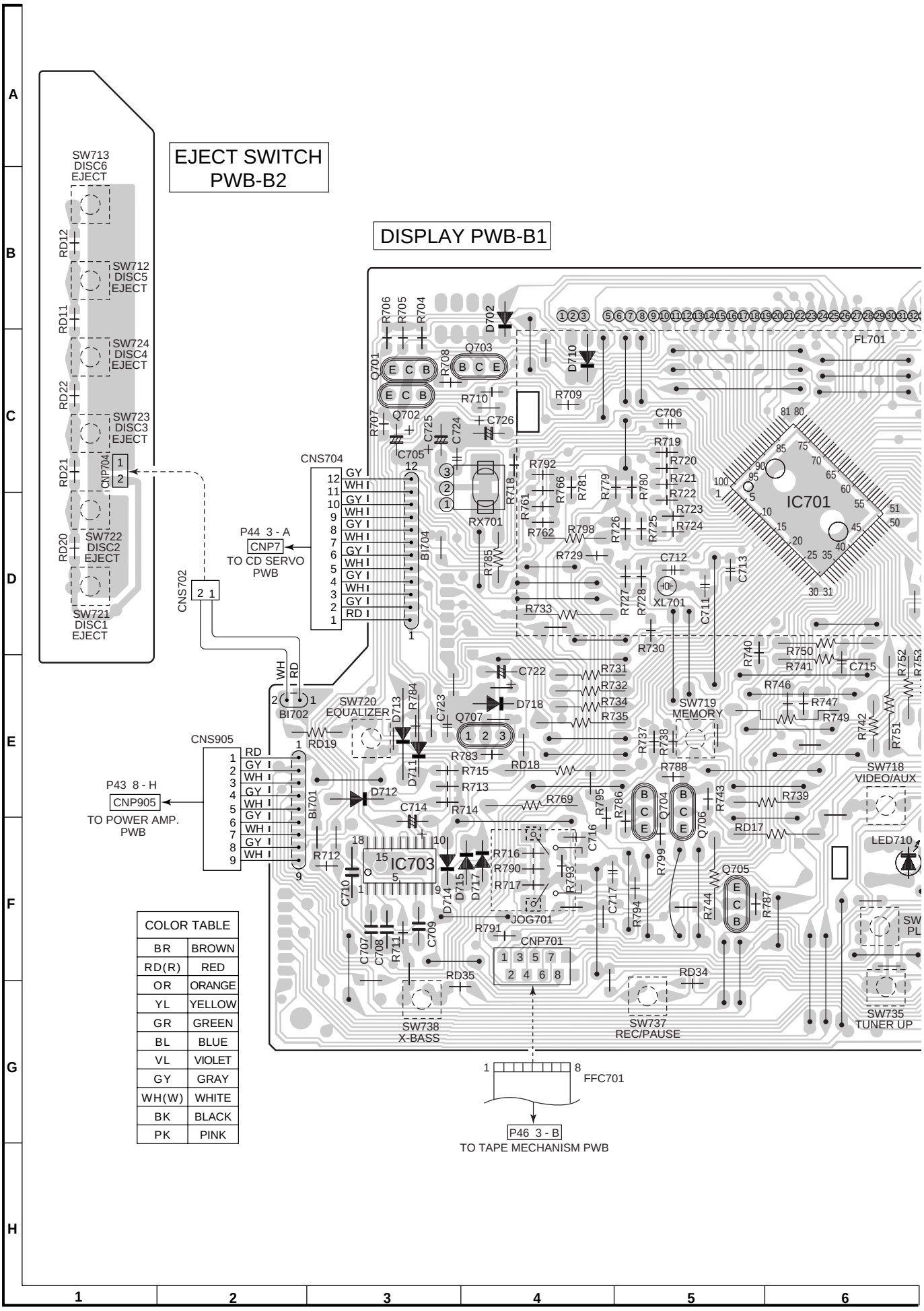
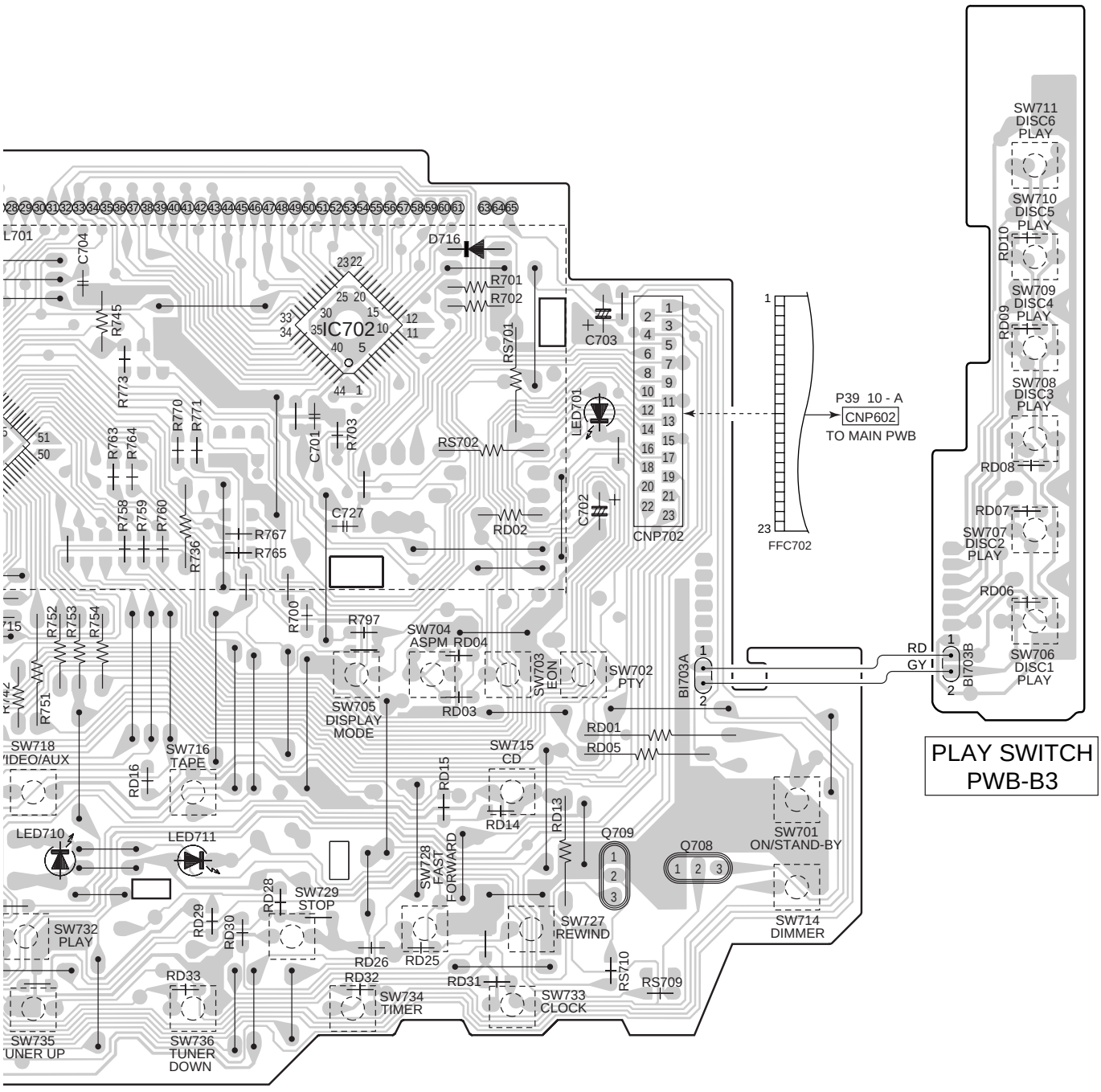


Figure 40 WIRING SIDE OF P.W.BOARD (3/9)



7	8	9	10	11	12

Figure 41 WIRING SIDE OF P.W.BOARD (4/9)

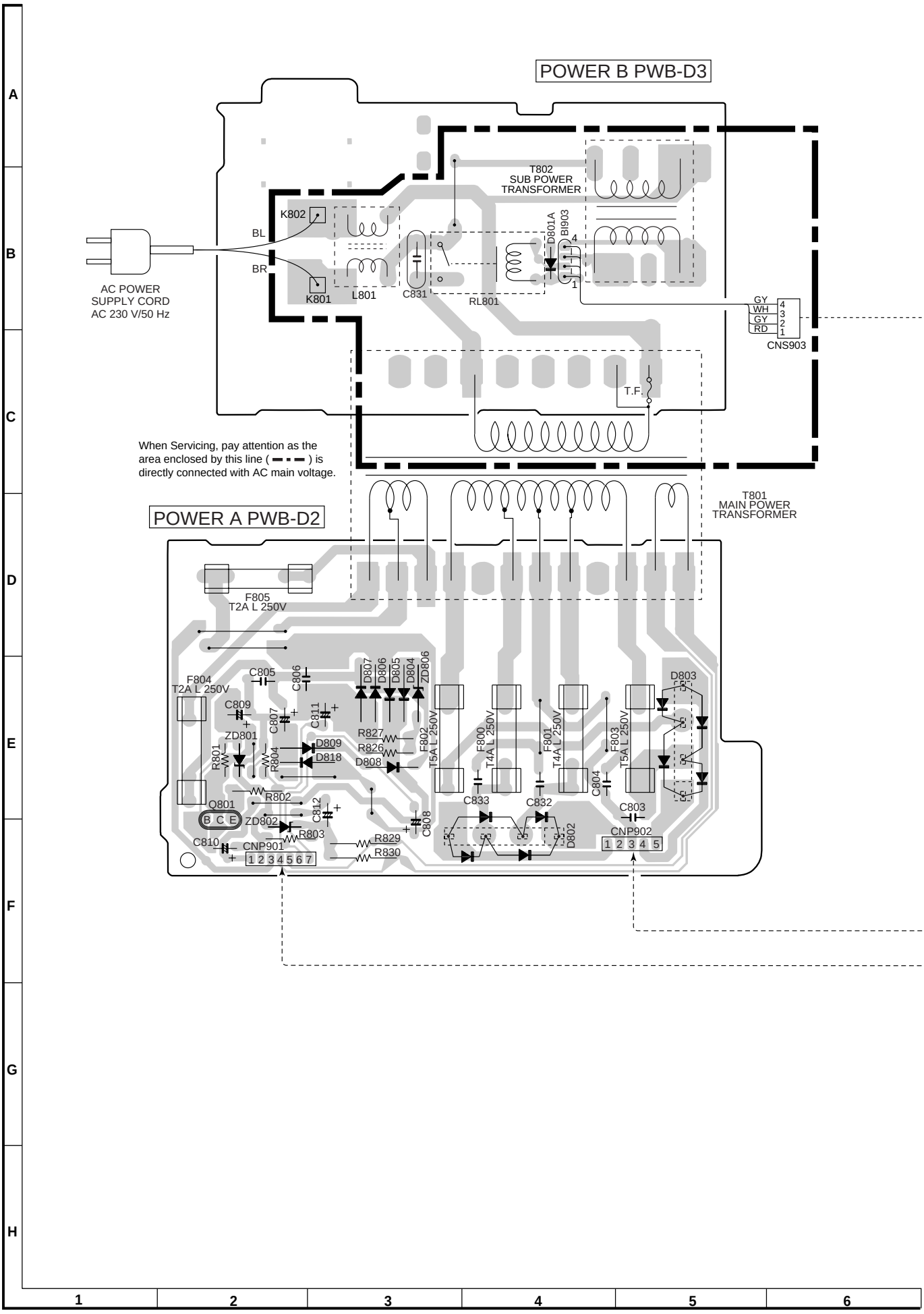
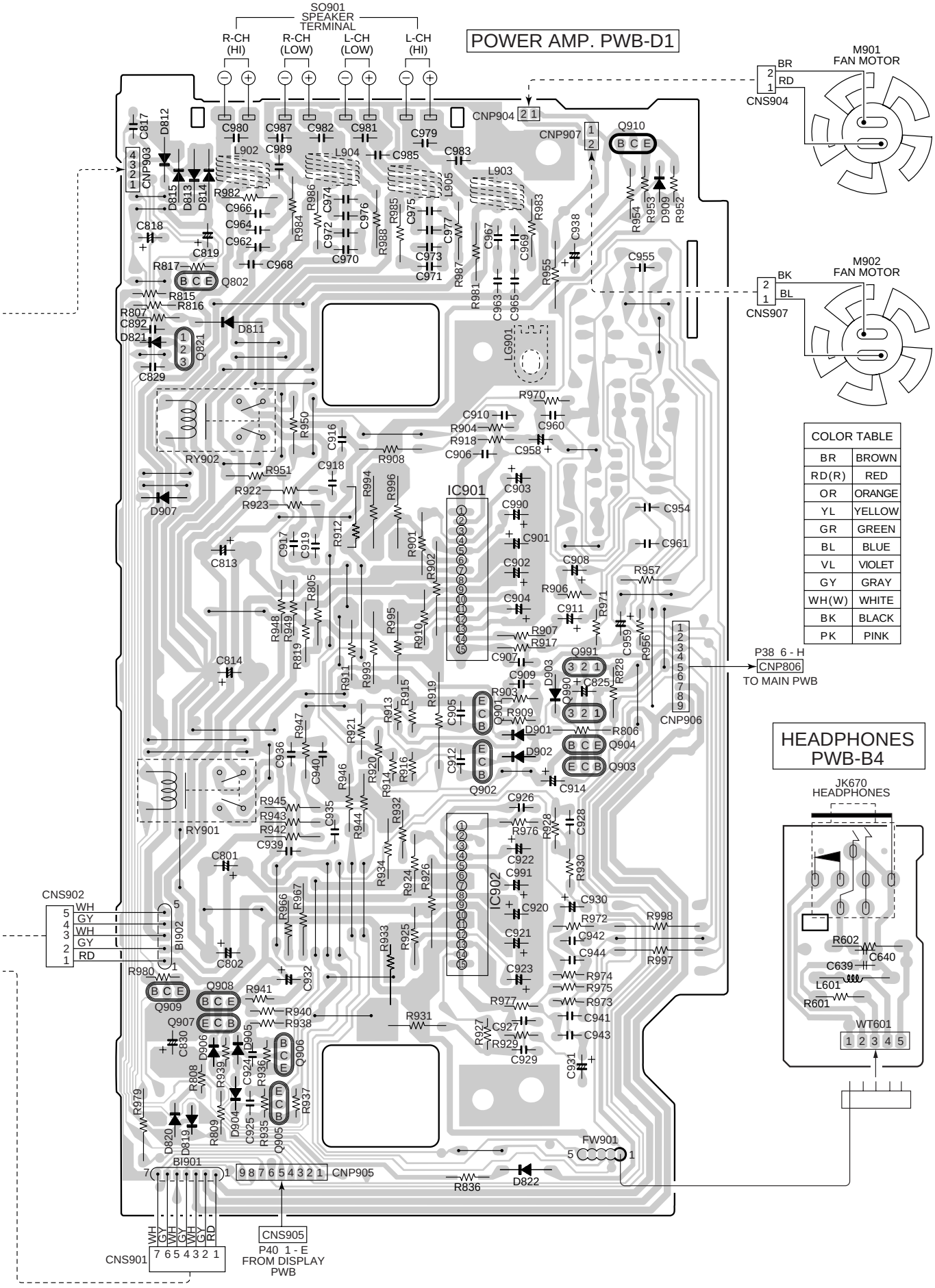
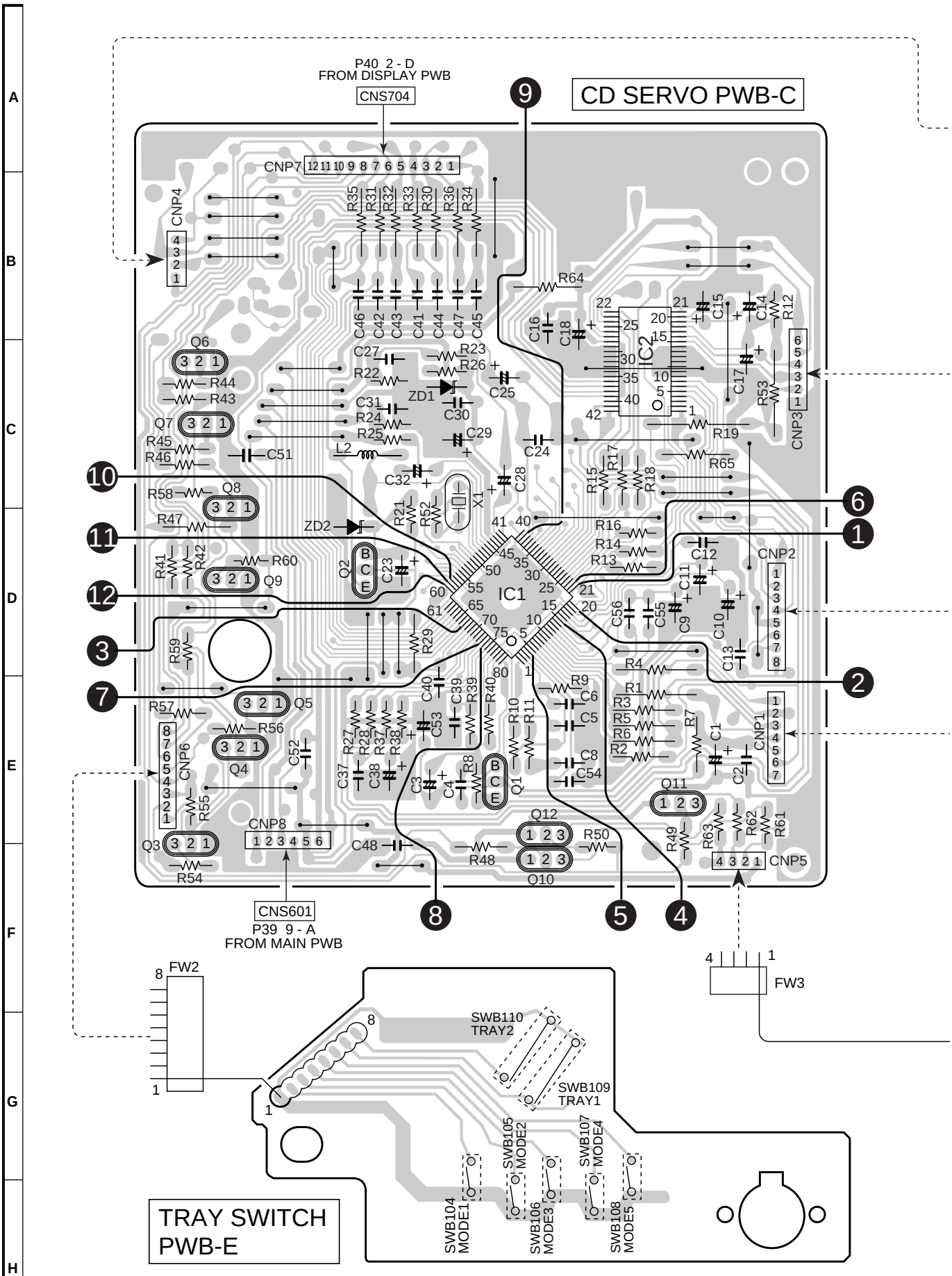


Figure 42 WIRING SIDE OF P.W.BOARD (5/9)



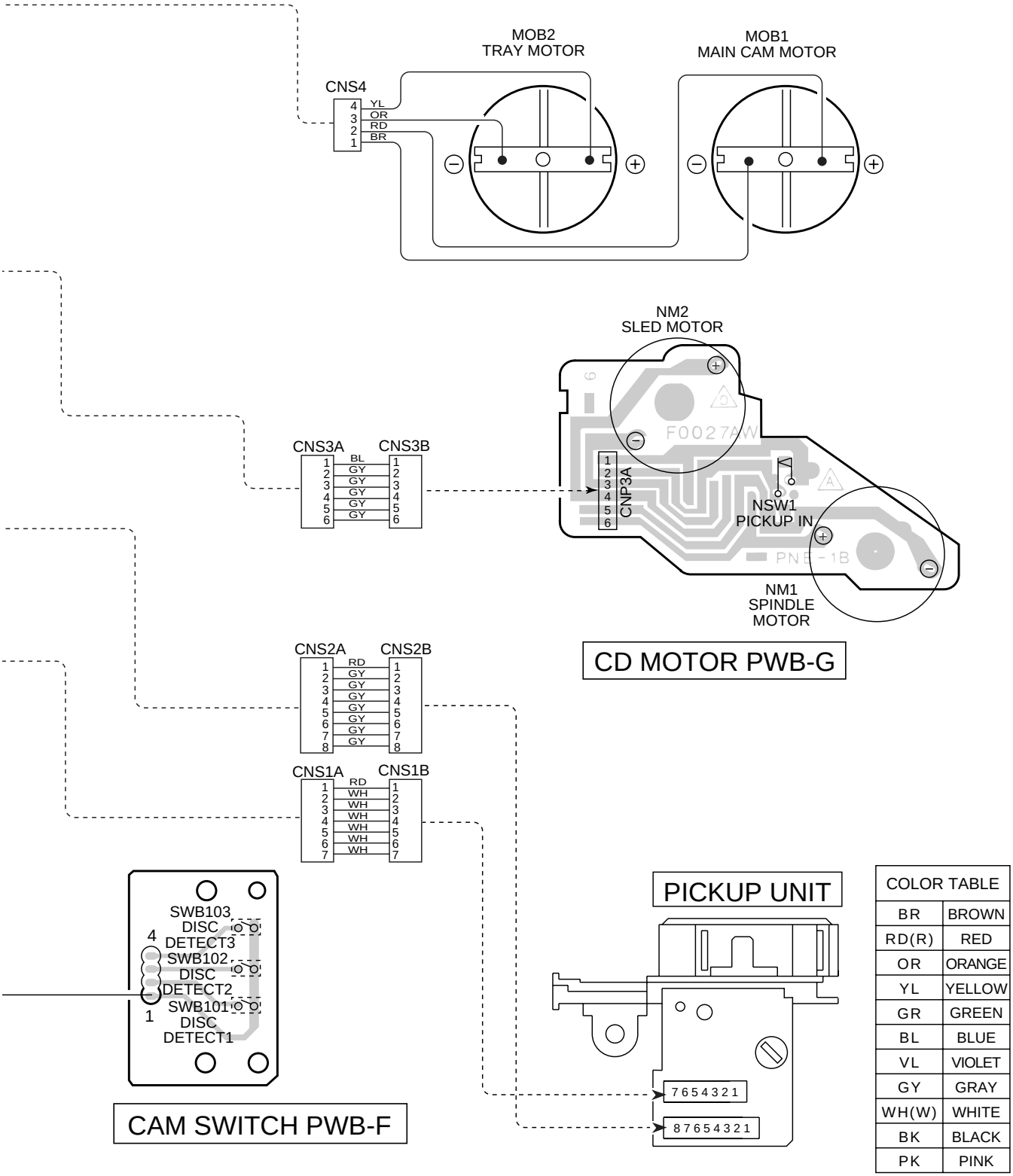
7	8	9	10	11	12

Figure 43 WIRING SIDE OF P.W.BOARD (6/9)



• The numbers ❶ to ⓬ are waveform numbers shown in page 49.

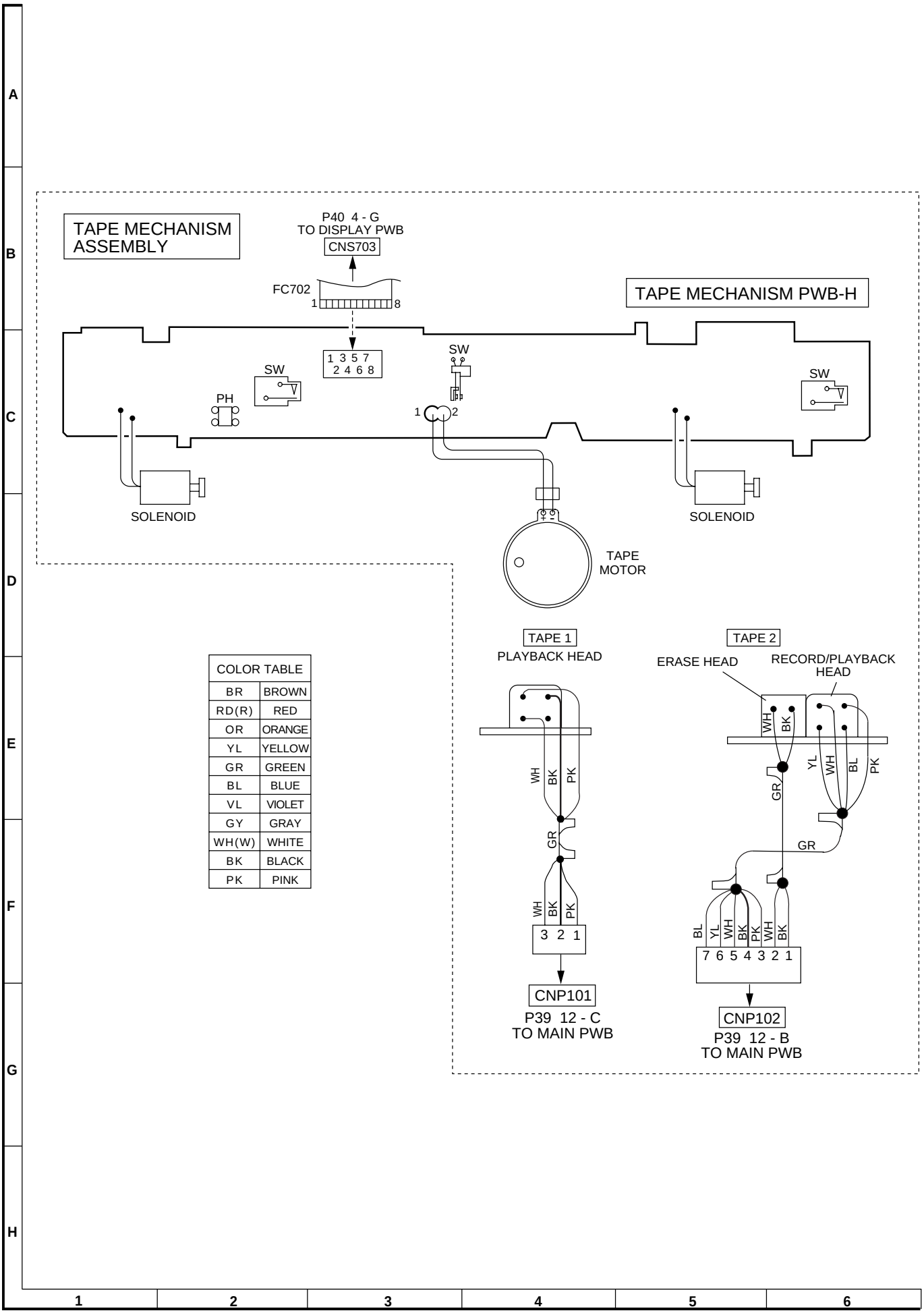
Figure 44 WIRING SIDE OF P.W.BOARD (7/9)



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

7	8	9	10	11	12

Figure 45 WIRING SIDE OF P.W.BOARD (8/9)



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

Figure 46 WIRING SIDE OF P.W.BOARD (9/9)

VOLTAGE

IC1

PIN NO	VOLTAGE	PIN NO	VOLTAGE
1	1.6 V	41	3.7 V
2	1.0 V	42	3.7 V
3	1.6 V	43	0 V
4	1.8 V	44	0 V
5	3.3 V	45	3.7 V
6	0 V	46	3.2 V
7	1.6 V	47	3.2 V
8	1.6 V	48	3.2 V
9	1.6 V	49	0 V
10	1.6 V	50	0 V
11	1.6 V	51	0 V
12	1.6 V	52	3.2 V
13	1.5 V	53	0 V
14	1.5 V	54	0 V
15	1.5 V	55	0 V
16	1.5 V	56	0 V
17	0.8 V	57	0 V
18	3.2 V	58	3.2 V
19	0 V	59	0 V
20	1.6 V	60	0 V
21	1.6 V	61	0 V
22	1.6 V	62	4.7 V
23	1.6 V	63	0 V
24	0 V	64	4.9 V
25	0 V	65	4.9 V
26	3.2 V	66	4.9 V
27	0 V	67	0 V
28	0 V	68	4.9 V
29	0 V	69	0 V
30	0 V	70	0 V
31	0 V	71	0 V
32	0 V	72	0 V
33	0 V	73	0 V
34	0 V	74	0 V
35	1.6 V	75	0 V
36	0 V	76	3.2 V
37	0 V	77	3.2 V
38	3.2 V	78	3.2 V
39	3.2 V	79	0 V
40	0 V	80	3.2 V

IC2

PIN NO	VOLTAGE
1	1.7 V
2	1.7 V
3	1.8 V
4	2.1 V
5	2.1 V
6	2.1 V
7	2.0 V
8	0 V
9	0 V
10	0 V
11	0 V
12	0 V
13	0 V
14	0 V
15	2.1 V
16	2.1 V
17	1.6 V
18	4.9 V
19	3.0 V
20	1.6 V
21	0 V
22	0 V
23	4.9 V
24	4.9 V
25	1.6 V
26	2.1 V
27	2.1 V
28	0 V
29	0 V
30	0 V
31	0 V
32	0 V
33	0 V
34	0 V
35	0 V
36	4.2 V
37	0 V
38	2.1 V
39	2.1 V
40	4.9 V
41	3.7 V
42	3.7 V

IC701

PIN NO	VOLTAGE	PIN NO	VOLTAGE
1	4.8 V	51	4.6 V
2	0 V	52	4.3 V
3	4.9 V	53	0 V
4	4.9 V	54	0 V
5	4.9 V	55	0 V
6	4.9 V	56	4.3 V
7	4.9 V	57	4.8 V
8	4.9 V	58	0 V
9	4.9 V	59	0 V
10	4.9 V	60	4.3 V
11	0 V	61	4.3 V
12	4.9 V	62	0 V
13	0.5 V	63	0 V
14	0 V	64	4.9 V
15	0 V	65	0 V
16	2.4 V	66	2.5 V
17	2.9 V	67	0 V
18	4.8 V	68	4.8 V
19	0 V	69	4.8 V
20	5.4 V	70	–15.7 V
21	0.7 V	71	–16.0 V
22	0 V	72	–20.2 V
23	4.8 V	73	–16.4 V
24	0 V	74	–16.1 V
25	0.7 V	75	–16.4 V
26	5.4 V	76	–16.3 V
27	2.3 V	77	–21.3 V
28	0 V	78	–21.0 V
29	3.4 V	79	4.8 V
30	3.0 V	80	–28.4 V
31	5.0 V	81	–21.8 V
32	4.4 V	82	–20.6 V
33	12.3 V	83	–15.6 V
34	12.3 V	84	–20.5 V
35	12.3 V	85	–23.1 V
36	0 V	86	–22.6 V
37	4.9 V	87	–22.9 V
38	0 V	88	–22.8 V
39	4.9 V	89	–18.8 V
40	0 V	90	–23.4 V
41	4.9 V	91	–23.5 V
42	4.9 V	92	–14.4 V
43	4.9 V	93	–19.9 V
44	0 V	94	–19.6 V
45	0.6 V	95	–20.7 V
46	0 V	96	–18.9 V
47	0.6 V	97	–18.9 V
48	0 V	98	–19.0 V
49	0 V	99	–21.2 V
50	0 V	100	–20.8 V

IC702

PIN NO	VOLTAGE	PIN NO	VOLTAGE
1	0 V	23	–27.9 V
2	0 V	24	–14.9 V
3	0 V	25	–14.9 V
4	0 V	26	–27.9 V
5	1.9 V	27	–24.6 V
6	0 V	28	–27.9 V
7	3.0 V	29	–11.8 V
8	3.5 V	30	–28.4 V
9	2.5 V	31	–28.1 V
10	0 V	32	–28.1 V
11	0 V	33	–28.1 V
12	0 V	34	–28.1 V
13	4.9 V	35	–25.4 V
14	–27.9V	36	–25.4 V
15	–14.9V	37	–25.4 V
16	–24.6 V	38	–25.4 V
17	–24.6 V	39	–25.4 V
18	–26.9 V	40	–25.4 V
19	–14.9 V	41	–25.4 V
20	–18.1 V	42	–25.4 V
21	–18.1 V	43	4.9 V
22	–18.2 V	44	0 V

IC101

PIN NO	VOLTAGE
1	0 V
2	0 V
3	0.5 V
4	1.9 V
5	0 V
6	0 V
7	0 V
8	0.6 V
9	3.3 V
10	3.3 V
11	0 V
12	0 V
13	6.7 V
14	4.0 V
15	0 V
16	3.3 V
17	0.6 V
18	0 V
19	0 V
20	0 V
21	1.9 V
22	0.5 V
23	0 V
24	0 V

IC601

PIN NO	VOLTAGE
1	3.0 V
2	0 V
3	0 V
4	5 V
5	5 V
6	5 V
7	5 V
8	5 V
9	5 V
10	5 V
11	5 V
12	5 V
13	5 V
14	5 V
15	5 V
16	5 V
17	5 V
18	5 V
19	5 V
20	5 V
21	5 V
22	5 V
23	10 V
24	3.4 V

IC302

PIN NO	VOLTAGE
1	2.4 V
2	0 V
3	0 V
4	0 V
5	2.9 V
6	4.8 V
7	0.1 V
8	4.2 V
9	3.3 V
10	0 V
11	5.1 V
12	2.2 V
13	5 V
14	0 V
15	0 V
16	2.3 V
17	5 V
18	0.6 V
19	0.8 V
20	2 V
21	0 V
22	2.5 V

IC901

PIN NO	VOLTAGE
1	0 V
2	0 V
3	0 V
4	36.8 V
5	–35.5 V
6	0 V
7	0 V
8	37.6 V
9	–37.7 V
10	0 V
11	0 V
12	–37.1 V
13	0 V
14	0 V
15	0 V

IC301

PIN NO	VOLTAGE
1	0.8 V
2	1.5 V
3	3.6 V
4	1.5 V
5	0 V
6	3.6 V
7	2.8 V
8	3.5 V
9	3.6 V

Q850

PIN NO	VOLTAGE
1	12.2 V
2	21 V
3	12.9 V

Q851

PIN NO	VOLTAGE
1	21 V
2	0 V
3	10 V

IC703

PIN NO	VOLTAGE
1	2.5 V
2	1.5 V
3	2.5 V
4	N.C.
5	N.C.
6	N.C.
7	2.5 V
8	2.5 V
9	4.9 V
10	0.4 V
11	0.9 V
12	0.4 V
13	4.9 V
14	N.C.
15	N.C.
16	0 V
17	0 V
18	0 V

IC705

PIN NO	VOLTAGE
1	9 V
2	9 V
3	3.5 V
4	3.5 V
5	9 V
6	0.5 V
7	0.5 V
8	1 V
9	5 V
10	0 V
11	9 V
12	4 V
13	4 V
14	9 V
15	4 V
16	2.5 V
17	9 V
18	9 V

IC903

PIN NO	VOLTAGE
1	0 V
2	0 V
3	0 V
4	–13.0 V
5	13.2 V
6	0 V
7	0 V
8	0 V

IC902

PIN NO	VOLTAGE
1	0 V
2	0 V
3	0 V
4	31.1 V
5	–29.7 V
6	0 V
7	0 V
8	32.1 V
9	–32.3 V
10	0 V
11	0 V
12	–31.2 V
13	0 V
14	0 V
15	0 V

Q852

PIN NO	VOLTAGE
1	10 V
2	0.7 V
3	5.6 V

IC303

PIN NO	VOLTAGE
1	2.1 V
2	4.5 V
3	2.1 V
4	2.1 V
5	0 V
6	4.6 V
7	4.6 V
8	2.4 V
9	4.5 V
10	3.9 V
11	3.3 V
12	3.3 V
13	3.5 V
14	1.2 V
15	1.2 V
16	2.0 V
17	2.7 V
18	2.1 V
19	0 V
20	0.3 V
21	2.6 V
22	2.6 V
23	4.5 V
24	3.0 V

ICT21

PIN NO	VOLTAGE
1	2.5 V
2	2.5 V
3	5.1 V
4	0 V
5	2.5 V
6	2.5 V
7	0 V
8	2.5 V
9	2.5 V
10	0 V
11	5.1 V
12	5.1 V
13	0 V
14	0 V
15	4.5 V
16	0 V

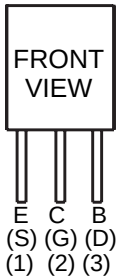
NOTES ON SCHEMATIC DIAGRAM

- Resistor:
  To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with “Fusible” is a fuse type.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means pico-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression “capacitance/withstand voltage” is used.
  (CH), (TH), (RH), (UJ): Temperature compensation
  (ML): Mylar type
  (P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
  1. In the tuner section,
     indicates AM
     indicates FM stereo
  2. In the main section, a tape is being played back.
  3. In the deck section, a tape is being played back.
     ( ) indicates the record state.
  4. In the power section, a tape is being played back.
  5. In the CD section, the CD is stopped.
- Parts marked with “ ⚠ ” (⊏ ═ ═ ═ ⊐) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

REF. NO	DESCRIPTION	POSITION
NSW1	PICKUP IN	ON—OFF
SW701	ON/STAND-BY	ON—OFF
SW702	PTY	ON—OFF
SW703	EON	ON—OFF
SW704	ASPM	ON—OFF
SW705	DISPLAY MODE	ON—OFF
SW706	DISC 1 PLAY	ON—OFF
SW707	DISC 2 PLAY	ON—OFF
SW708	DISC 3 PLAY	ON—OFF
SW709	DISC 4 PLAY	ON—OFF
SW710	DISC 5 PLAY	ON—OFF
SW711	DISC 6 PLAY	ON—OFF
SW712	DISC 5 EJECT	ON—OFF
SW713	DISC 6 EJECT	ON—OFF
SW714	DIMMER	ON—OFF
SW715	CD	ON—OFF
SW716	TAPE	ON—OFF
SW717	TUNER	ON—OFF
SW718	VIDEO/AUX	ON—OFF
SW719	MEMORY	ON—OFF
SW720	EQUALIZER	ON—OFF
SW721	DISC 1 EJECT	ON—OFF
SW722	DISC 2 EJECT	ON—OFF

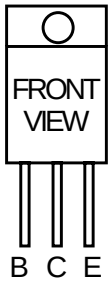
REF. NO	DESCRIPTION	POSITION
SW723	DISC 3 EJECT	ON—OFF
SW724	DISC 4 EJECT	ON—OFF
SW727	REWIND	ON—OFF
SW728	FAST FORWARD	ON—OFF
SW729	STOP	ON—OFF
SW732	PLAY	ON—OFF
SW733	CLOCK	ON—OFF
SW734	TIMER	ON—OFF
SW735	TUNER UP	ON—OFF
SW736	TUNER DOWN	ON—OFF
SW737	REC/PAUSE	ON—OFF
SW738	X-BASS	ON—OFF
SWB101	DISC DETECT 1	ON—OFF
SWB102	DISC DETECT 2	ON—OFF
SWB103	DISC DETECT 3	ON—OFF
SWB104	MODE 1	ON—OFF
SWB105	MODE 2	ON—OFF
SWB106	MODE 3	ON—OFF
SWB107	MODE 4	ON—OFF
SWB108	MODE 5	ON—OFF
SWB109	TRAY 1	ON—OFF
SWB110	TRAY 2	ON—OFF

TYPES OF TRANSISTOR AND LED

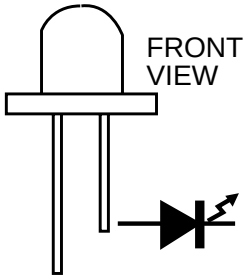


KTA1266 GR
KRA107 M
KRC102 M
KRC104 M
KRC107 M
KTA1274 Y

KTA1273 Y
KTC3203 Y
KTC3199 GR
2SA1015 GR
2SC1845 F
2SC380 O



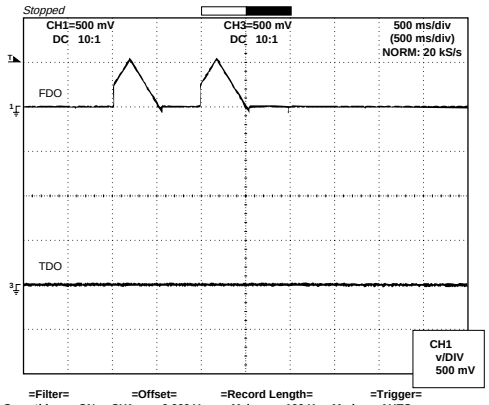
KTC2026



4204SRT121
4204UYT121

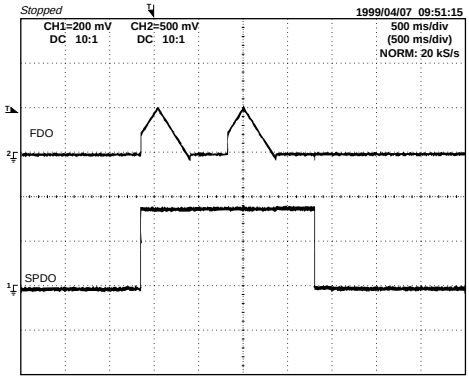
WAVEFORMS OF CD CIRCUIT

1 IC1 (21)
2 IC1 (20)



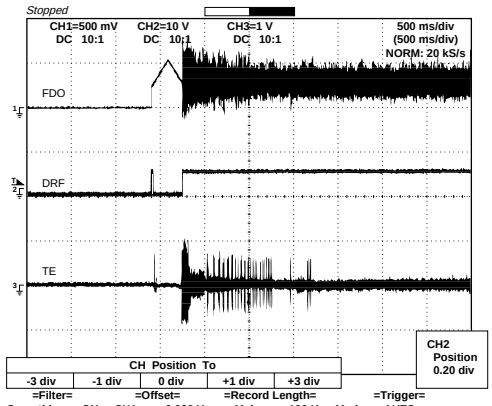
=Filter=		=Offset=		=Record Length=		=Trigger=	
Smoothing :	ON	CH1 :	0.000 V	Main :	100 K	Mode :	AUTO
BW :	FULL	CH2 :	0.0 V	Zoom :	2 K	Type :	EDGE CH1
		CH3 :	0.000 V			Delay :	0.0 ns
		CH4 :	0.00 V			Hold off :	0.2 µs

1 IC1 (21)
6 IC1 (22)



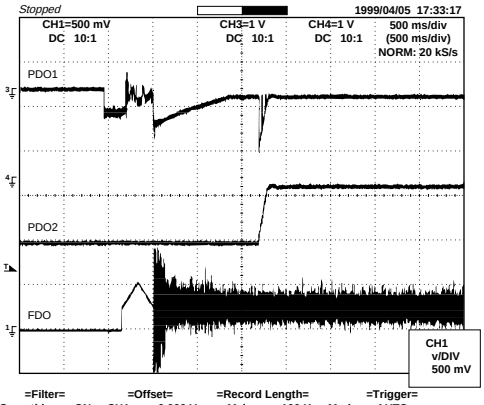
=Filter=		=Offset=		=Record Length=		=Trigger=	
Smoothing :	ON	CH1 :	0.000 V	Main :	100 K	Mode :	NORMAL
BW :	FULL	CH2 :	0.000 V	Zoom :	2 K	Type :	EDGE CH2
		CH3 :	0.00 V			Delay :	2.924 ms
		CH4 :	0.00 V			Hold off :	0.2 µs

1 IC1 (21)
3 IC1 (67)
4 IC1 (15)



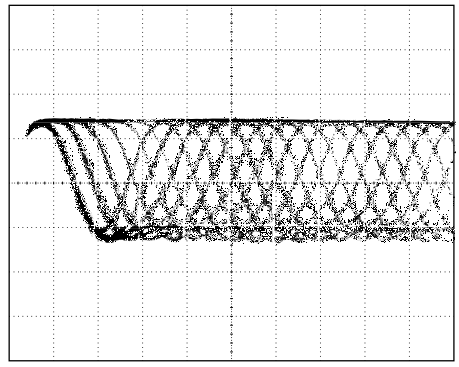
=Filter=		=Offset=		=Record Length=		=Trigger=	
Smoothing :	ON	CH1 :	0.000 V	Main :	100 K	Mode :	AUTO
BW :	FULL	CH2 :	0.0 V	Zoom :	2 K	Type :	EDGE CH1
		CH3 :	0.00 V			Delay :	0.0 ns
		CH4 :	0.00 V			Hold off :	0.2 µs

7 IC1 (73)
8 IC1 (74)
1 IC1 (21)



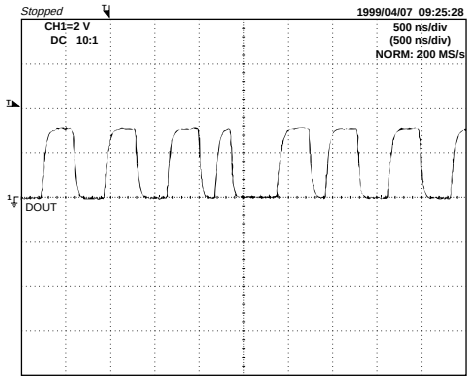
=Filter=		=Offset=		=Record Length=		=Trigger=	
Smoothing :	ON	CH1 :	0.000 V	Main :	100 K	Mode :	AUTO
BW :	FULL	CH2 :	0.0 V	Zoom :	2 K	Type :	EDGE CH2
		CH3 :	0.00 V			Delay :	0.0 ns
		CH4 :	0.00 V			Hold off :	0.2 µs

5 IC1 (4)



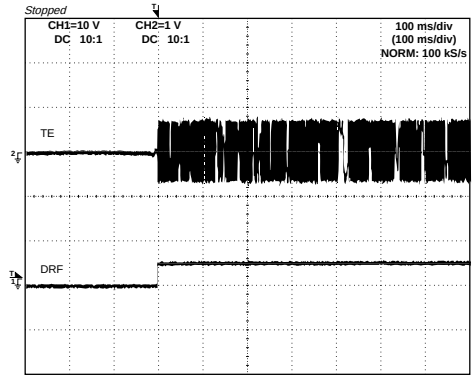
Vp-p=1.0 V~1.3 V
0.5 mV/div,0.5 µsec/div

9 IC1 (39)



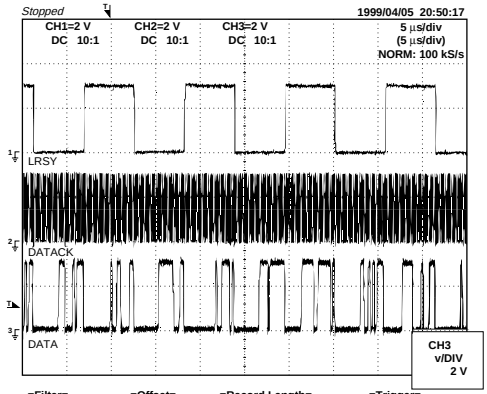
=Filter=		=Offset=		=Record Length=		=Trigger=	
Smoothing :	ON	CH1 :	0.00 V	Main :	1 K	Mode :	NORMAL
BW :	FULL	CH2 :	0.00 V	Zoom :	100	Type :	EDGE CH1
		CH3 :	0.00 V			Delay :	2.887 ms
		CH4 :	0.00V			Hold off :	0.2 µs

4 IC1 (15)
3 IC1 (67)



=Filter=		=Offset=		=Record Length=		=Trigger=	
Smoothing :	ON	CH1 :	0.0 V	Main :	100 K	Mode :	NORMAL
BW :	FULL	CH2 :	0.00 V	Zoom :	2 K	Type :	EDGE CH1
		CH3 :	0.00 V			Delay :	2.924 ms
		CH4 :	0.00 V			Hold off :	0.2 µs

10 IC1 (58)
11 IC1 (59)
12 IC1 (60)



=Filter=		=Offset=		=Record Length=		=Trigger=	
Smoothing :	ON	CH1 :	0.00 V	Main :	5 K	Mode :	AUTO
BW :	FULL	CH2 :	0.00 V	Zoom :	100	Type :	EDGE CH3
		CH3 :	0.00 V			Delay :	0.0 ns
		CH4 :	0.00 V			Hold off :	0.2 µs

TROUBLE SHOOTING

When the CD does not function

When the CD section does not operate when the objective lens of the optical pickup is dirty, this section may not operate. Clean the objective lens, and check the playback operation. When this section does not operate even after the above step is taken, check the following items.
Remove the cabinet and follow the trouble shooting instructions.
"Track skipping and/or no TOC (Table Of Contents) may be caused by build up of dust other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

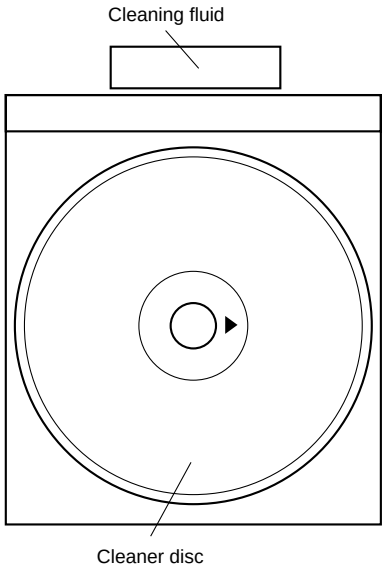
Turn off the power, and wipe the lens softly using a cleaning paper moistened with commercially available cleaning solution so as not to damage it. Be careful not to touch the lens with bare hands.

Dust gradually accumulates on the objective lens during use, and it may degrade performance. To avoid this problem, use a cleaning disc designed for CD optical pickup lenses.

		Parts code
1.	CD optical pickup Lens cleaner disc	UDSKA0004AFZZ

HOW TO USE

1. Using the brush in the cleaner cap, apply 1 or 2 drops of the cleaning fluid to the brush on the CD cleaner disc which has the mark next to it.
2. Place the CD cleaner disc onto the CD disc tray with the brush side down,then press the play button.
3. You will hear music for about 20 seconds and the CD player will automatically stop. If it continuous to turn, press the stop button.



CAUTION

- The CD lens cleaner should be effective for 30-50 operations, however if the brushes become worn out earlier then please the cleaner disc.
- If the CD cleaner brushes become very wet then wipe off any excess fluid with a soft cloth.
- Do not drink the cleaner fluid or allow it to come in contact with the eyes. In the event of this happening then drink and / or rinse with clean water and seek medical advice.
- The CD cleaner disc must not be used on car CD players or on computer CD-ROM drives.
- All rights reserved. Unauthorized duplicating, broadcasting and renting this product is prohibited by law.

When a CD cannot be played

1. "E-CD01" is displayed.

(1) Check the power to IC1 (LC78645E), the presence of the clock signal (33.8688 MHz) and the status of the RESET terminal (pin 48 on IC1).
(2) Does the pickup move to the PICKUP-IN Switch (NSW1) position?

If (1) and (2) are OK, check the system microcomputer (especially the communication line with the DSP).

2. Pressing the CD operation key is accepted, but playback does not occur.

(1) Focus-HF system check
(2) Tracking system check
(3) Spin system check
(4) PLL system check
(5) Others

(1) Focus-HF system check.

Although a CD is inserted and the cover is closed, "NO DISC" is displayed.

Press the Disc 1~6 Eject switch (SW712, SW713, SW721~SW724) without inserting a disc, and try starting the playback operation.

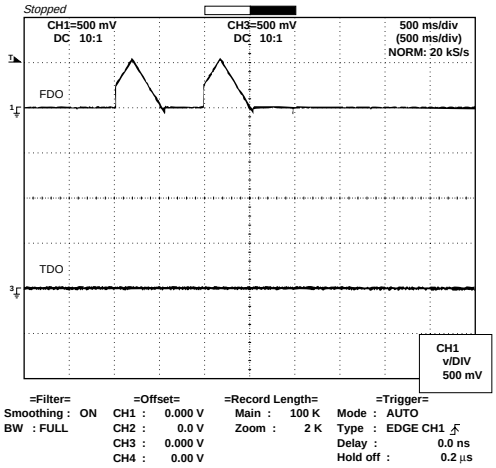


Figure 51-1

1. Does the pickup move to the PICKUP-IN Switch (NSW1) position ?
   - No → Sled motor (NM2).
   - Yes ↓
2. Does the focus (lens) move up and down ? (Waveform drawing Figure 51-1).
   - No → Check the focus peripheral circuit.
   - Yes ↓
3. Is the laser lit ?
   - No → Check the laser diode driver Q1 peripheral circuit.
   - Yes ↓
4. Is the turntable rotating ?
   - No → Spindle motor (NM1).

When a disc is loaded, start playback operation.

1. Is focus servo activated ? (Waveform drawing Figure 51-2)
   - No → Pins 7~12, 79 and 80 on IC1
     Check the laser diode driver Q1 peripheral circuit.
   - Yes ↓
2. Does DRF change from "L" to "H" ?
   - No → Is the disc rotating ?
     - No → Check the spin system.
       If the disc is spinning and a HF waveform is generated, DRF will go H.
   - Yes ↓
3. Is the HF waveform normal ? (Waveform drawing Figure 51-3)
   - No → If the level is not normal.

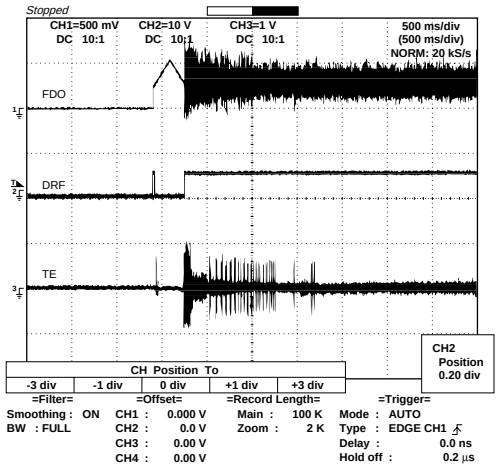


Figure 51-2

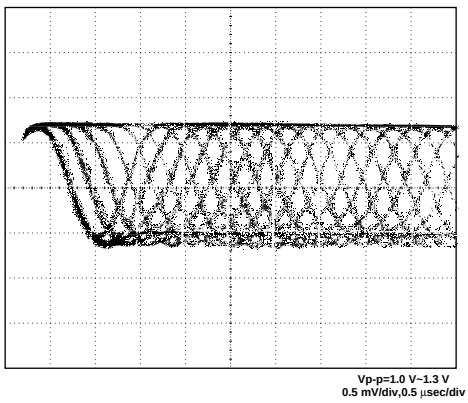


Figure 51-3

(2) Tracking system check.

Check the TE waveform at pin 15 on IC1.

If the waveform shown in Figure 52-1 appears and soon after NO DISC appears ?

Yes → The tracking servo is not activated.
Check the peripheral circuits at pins 14, 15 and 20 on IC1, and CNS1A/B.

No ↓

"Initialization" is possible, but play is not possible ?

Yes → A normal jump operation cannot be completed or the beginning of the track cannot be found.
Check the around pin 20 on IC1.

No ↓

"Initialization" is not possible. → Data cannot be read. Check the VCO-PLL system.

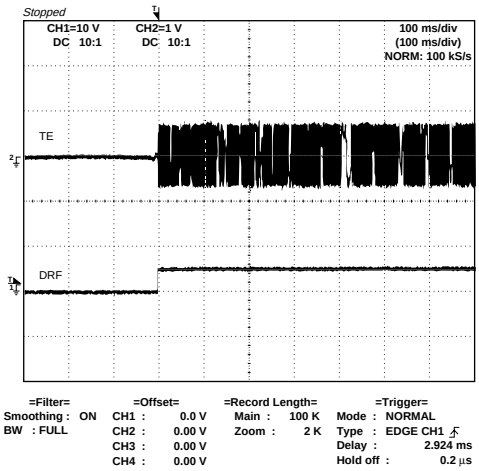


Figure 52-1

(3) Spin system check.

Press the Disc 1~6 switch without inserting a disc, and then try starting the play operation.

1. The turntable rotates a little ?
(Waveform drawing Figure 52-2)

Yes → The spin driver circuit is OK.

No ↓

2. The turntable doesn't rotate. → Check around pin 22 on IC1, pins 26 and 27 on IC2, and CNS3A/B.

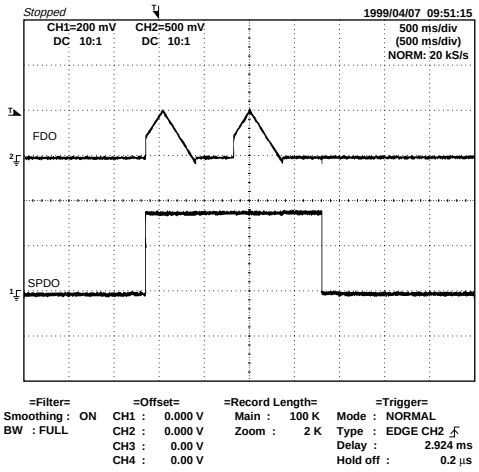


Figure 52-2

(4) PLL system check.

When a disc is loaded, start play operation.

↓

The HF waveform is normal, but the TOC data cannot be read.

↓

Check the PDO waveform. (Figure 53-1)

↓

Check around pins 73~78 on IC1.

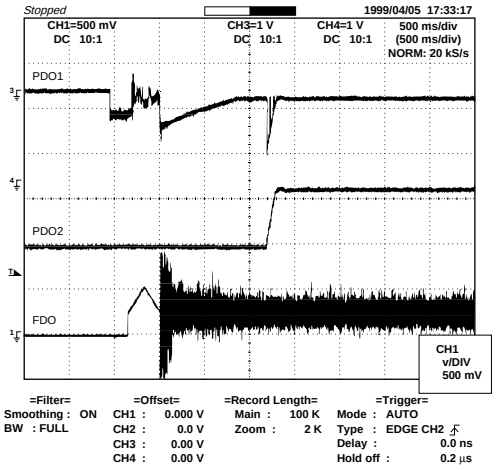


Figure 53-1

(5) Others.

The HF waveform is normal and the time is displayed normally, but no sound is produced. Or the sound has dropouts.

Is pin 52 (C2F) on IC1 "L" ?

No → There are too many error flags on a damaged disc which makes error correction impossible.

↓

Check again using a known good disc.

Yes

↓

1. When playing at normal speed
   Check the peripheral circuit at pin 39 (DOUT) on IC1 and the waveform (Figure 53-2).

↓

If OK, Check the unit.

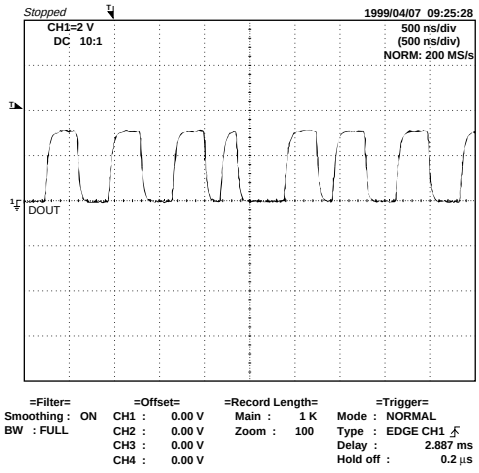


Figure 53-2

FUNCTION TABLE OF IC

IC1 VHiLC78645E-1: CD Servo (LC78645E) (1/2)

Pin No.	Terminal Name	Input/Output	Setting in Reset	Function	
1	SLCO	Output	—	For slice level control.	Control output.
2	SLCIST	Input	—		Resistor connection terminal for SLCO output current setting.
3	EFMIN	Input	—		RF signal input terminal.
4	RF	Output	—	RF signal monitor terminal.	
5	RFVDD	Input	—	RF power terminal.	
6	RFVSS	—	—	RF earth terminal. To be connected to 0 V.	
7	FIN1 A	Input	—	A+C signal input terminal.	
8	FIN2 B	Input	—	B+D signal input terminal.	
9	TIN1 E	Input	—	E signal input terminal.	
10	TIN2 F	Input	—	F signal input terminal.	
11	VREF	Output	RFVDD/2	VREF voltage output terminal.	
12	REFI	Input	—	Reference supply setting terminal.	
13*	FE	Output	ZHI	FE signal monitor terminal.	
14	TEC	Output	—	LPF capacitor connection terminal for TE signal.	
15*	TE	Output	ZHI	TE signal monitor terminal.	
16*	RFMON	Output	ZHI	RF internal signal monitor terminal.	
17	JITTC	—	—	Capacitor connection terminal for jitter detection.	
18	ADAVDD	Input	—	Power terminal for servo A/D, D/A.	
19	ADAVSS	—	—	Earth terminal for serve A/D, D/A. To be connected to 0 V.	
20	TDO	Output	ADAVDD/2	Output terminal for tracking control. D/A output.	
21	FDO	Output	ADAVDD/2	Output terminal for focus control. D/A output.	
22	SPDO	Output	ADAVDD/2	Output terminal for spindle control. D/A output.	
23	SLDO	Output	ADAVDD/2	Output terminal for sled control. D/A output.	
24*	GPDAC	Output	ADAVDD/2	Servo D/A general-purpose output terminal.	
25	CONT4	Input/Output	Input Mode	General-purpose I/O terminal 4.	Controlled by commands from the microcomputer. When not used, set them as input terminals and connect to 0 V, or set them as output terminals and leave open.
26	CONT5	Input/Output	Input Mode	General-purpose I/O terminal 5.	
27	SBCK/CONT6	Input/Output	Input Mode	General-purpose I/O terminal 6 or Subcode reading clock input terminal.	
28	SBCK/FG	Input	—	Subcode reading clock input terminal/FG signal input terminal/external emphasis setting terminal. Terminal functions are set by commands. When not used, connect to 0 V.	
29*	DEFECT	Output	L	Defect terminal.	
30*	V/*P	Output	H	Auto switching monitor output terminal for rough servo phase control. “H”: rough servo, “L”: phase servo.	
31*	FSEQ	Output	L	Sync signal detection output terminal. The status changes to “H” when the sync signal detected in EFM and the sync signal of internal generation are identified.	
32*	MONI1	Output	L	Internal signal monitor terminal 1.	
33*	MONI2	Output	L	Internal signal monitor terminal 2.	
34*	MONI3	Output	L	Internal signal monitor terminal 3.	
35*	MONI4	Output	L	Internal signal monitor terminal 4.	
36*	MONI5	Output	L	Internal signal monitor terminal 5.	
37	VSS	—	—	Digital system earth terminal. To be connected to 0 V.	
38	VDD	Input	—	Digital system power terminal.	
39*	DOUT	Output	L	Digital OUT output terminal. (EIAJ format)	
40	TEST	Input	L	Input terminal for test. To be connected to 0 V.	
41	LVDD	Input	—	Left channel D/A converter	Power supply for Left channel.
42	LCHO	Output	LVDD/2		Left channel output.
43	LVSS	—	—		GND for Left channel. Must be connected to 0 V.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

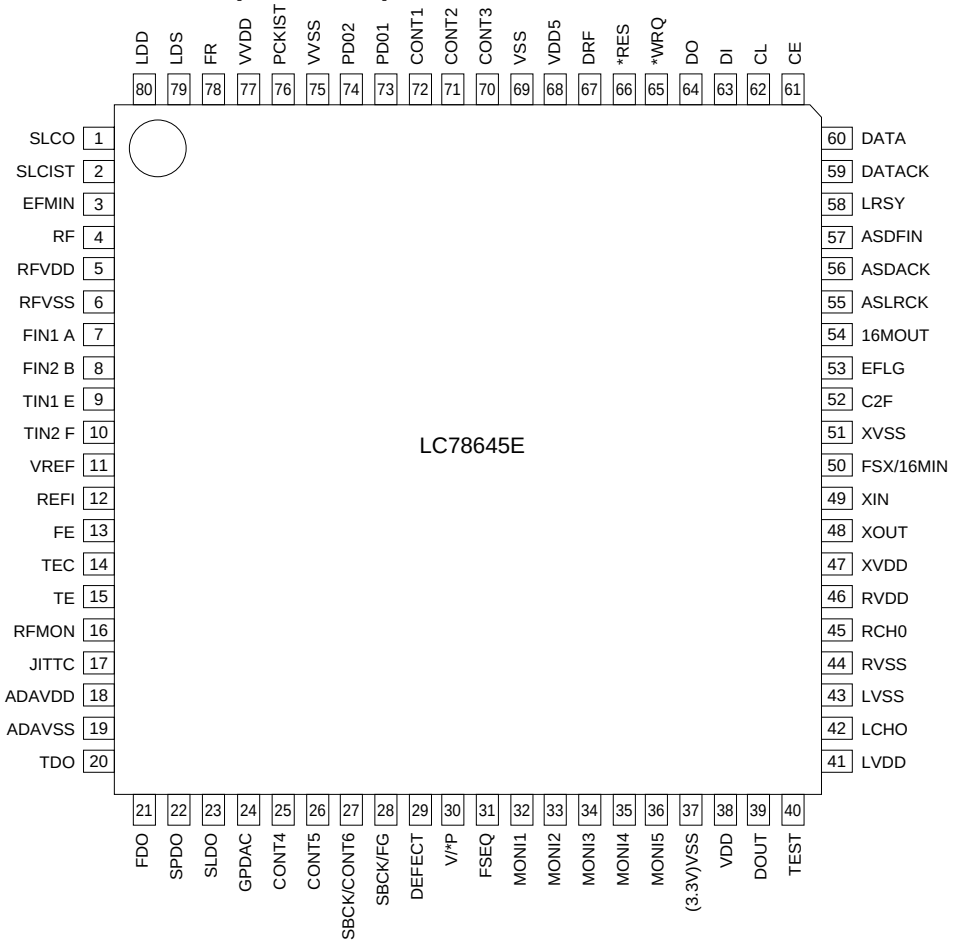
IC1 VHiLC78645E-1: CD Servo (LC78645E) (2/2)

Pin No.	Terminal Name	Input/Output	Setting in Reset	Function	
44	RVSS	—	—	Right channel D/A converter	GND for Right channel. Must be connected to 0 V.
45	RCHO	Output	LVDD /2		Right channel output.
46	RVDD	Input	—		Power supply for Right channel.
47	XVDD	Input	—	Crystal Oscillator	Power supply for crystal oscillator.
48	XOUT	Output	—		Connected for the 33.8688 MHz crystal oscillator cement.
49	XIN	Input	—		
50	FSX/16MIN	Input/Output	Input	7.35 kHz Synchronization signal monitor port. or Clock input port for Digital filter & D/A	
51	XVSS	—	—	Crystal Oscillator	GND for crystal oscillator. Must be connected to 0 V.
52*	C2F	Output	H	C2 FLAG monitor port.	
53*	EFLG	Output	L	C1, C2 error corrected monitor port.	
54*	16MOUT	Output	Clock	16.9344 MHz output port.	
55	ASLRCK	Input	—	Anti-shock	Word clock input port. (If this port does not use, must be connect to 0 V.)
56	ASDACK	Input	—		Bit clock input port. (If this port does not use, must be connect to 0 V.)
57	ASDFIN	Input	—		Left/Right channel data input port. (If this port does not use, must be connect to 0 V.)
58*	LRSY	Output	L	Digital data	Word clock output port.
59*	DATACK	Output	L		Bit clock output port.
60*	DATA	Output	L		Left/Right channel data output port.
61	CE	Input	—	Microcomputer Interface	Chip enable signal input port.
62	CL	Input	—		Data transfer clock input port.
63	DI	Input	—		Data input port.
64	DO	Output	(H)		Data output port. (N-ch. open drain output.)
65	*WRQ	Output	H		Interruption signal output.
66	*RES	Input	—	Chip reset signal input port. This port must be set LOW after first applied power on.	
67	DRF	Output	L	Focus detection output port.	
68	VDD5	Input	—	Power supply for Microprocessor.	
69	VSS	—	—	GND for digital circuit. Must be connected to 0 V.	
70	CONT3	Input/Output	Input	General purpose port 1.	Controlled with serial data command from micro-computer. When not used, General purpose input/ output terminal 7. Set it as the input terminal and open it by connecting to 0 V, or set it as the output terminal and open it.
71	CONT2	Input/Output	Input	General purpose port 2.	
72*	CONT1	Input/Output	Input	General purpose port 3.	
73	PDO1	Output	—	PLL	Internal VCO control phase comparator output port 1.
74	PDO2	Output	Input		Internal VCO control phase comparator output port 2.
75	VVSS	—	—		GND for internal VCO. Must be connected to 0 V.
76	PCKIST	Input	—		PDO output current adjustment resistor connection port.
77	VVDD	Input	—		Power supply for internal VCO.
78	FR	Input	—		VCO frequency range adjustment port.
79	LDS	Input	—	LASER power detected signal input port.	
80	LDD	Output	—	LASER power control signal output port.	

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

Be sure to supply the same potential to each power terminal. (VVDD, ADAVDD, VDD, LVDD, RVDD, XVDD)
Terminal witch is controlled by the power terminal (VDD5 V) for a microcomputer interface :
CE (61 pin), CL (62 pin), DI (63 pin), DO (64 pin), WRQ (65 pin), RES (66 pin), DRF (67 pin)

IC1 VHiLC78645E-1: CD Servo (LC78645E)



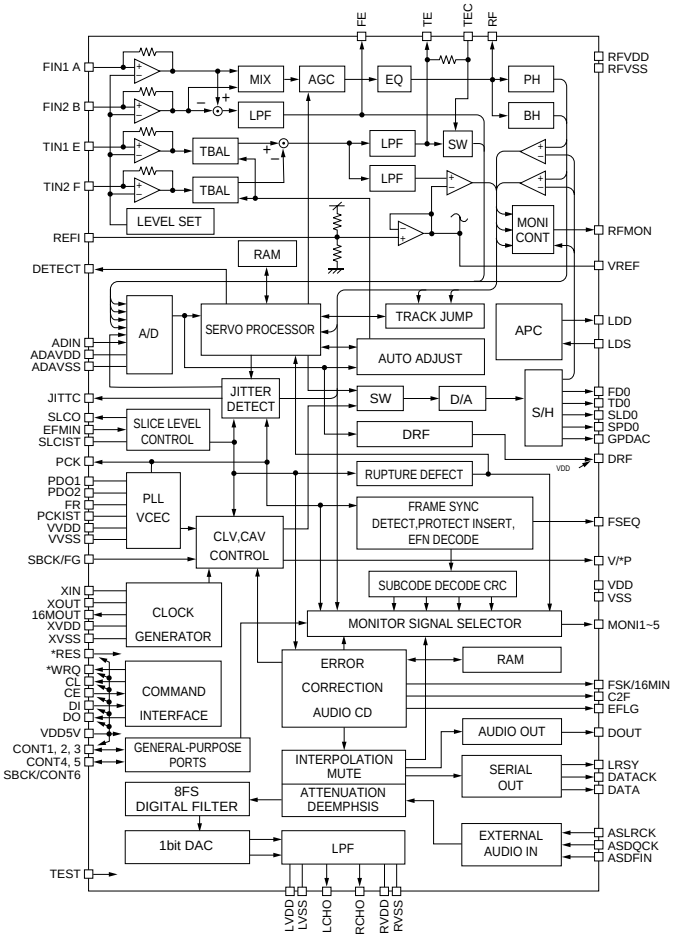


Figure 56 BLOCK DIAGRAM OF IC

IC701 RH-iX0402AWZZ: System Microcomputer (IX0402AW) (1/2)

Pin No.	Port Name	Terminal Name	Input/Output	Function
1	AVDD	AVDD	Input	ANALOG VDD.
2	ANI0	SPEANA AOUT	Input	SPEANA INPUT.
3	ANI1	CAM A SW A	Input	CD CAM A SW A CONTROL.
		CAM A SW B	Input	CD CAM A SW B CONTROL.
4	ANI2	CAM A SW C	Input	CD CAM A SW C CONTROL.
		CAM A SW D	Input	CD CAM A SW D CONTROL.
5	ANI3	CAM A SW E	Input	CD CAM A SW E CONTROL.
		CAM B SW A	Input	CD CAM B SW A CONTROL.
6	ANI4	CAM B SW B	Input	CD CAM B SW B CONTROL.
		TRAY SW A	Input	CD TRAY SW A.
7	ANI5	TRAY SW B	Input	CD TRAY SW B.
		TRAY SW C	Input	CD TRAY SW C.
8	ANI6	KEY 0	Input	KEY INPUT.
9	ANI7	KEY 1	Input	KEY INPUT.
10	ANI8	KEY 2	Input	KEY INPUT.
11	ANI9	T1RUN	Input	TAPE 1 RUN PULSE INPUT.
12	ANI10	T2RUN	Input	TAPE 2 RUN PULSE INPUT.
13	ANI11	TUN_SM	Input	TUNER SIGNAL METER.
		SPN	Input	TUNER SPAN SELECT.
14	AVSS	AVSS	—	ANALOG GND.
15	VSS1	VSS1	—	GND
16	X1	X1	Input	MAIN CLOCK.
17	X2	X2	Output	MAIN CLOCK.
18	VDD1	VDD1	Input	(+) POWER SUPPLY.
19	IC(VPP)	IC(VPP)	—	OPEN.
20	T100	REMOCON	Input	REMOTE CONTROL INPUT.
21	P25	CD DO/DVD BUS0/SO	Input	CD DSP CODE O OUT.
22	P26	CD DI/DVD BUS1/SI	Output	CD DSP COMMAND.
23	P27	CD CLK/DVD BUS2/SCK	Output	CD DSP CLOCK.
24	P67	CD CE/DVD BUS3	Output	CD DSP CE.
25	P66	WRQ/DVD BUS4	Input	CD DSP WRITE REQUEST.
26	INTP1	SP DET	Input	CD RF LEVEL DETECTION.
27	INTP0	P_IN	Input	SYSTEM STOP INPUT.
28	P63	CE_O	Output	CE OUTPUT.
29	P62	CLK	Output	CLOCK OUTPUT.
30	P61	DI	Output	DATA OUTPUT.
31	P60	DO	Input	DATA INPUT.
32	P57	TIMER LED	Output	TIMER LED CONTROL.
33	P56	T_SOL_A	Output	TAPE 1 SOLENOID CONTROL.
34	P55	T_SOL_B	Output	TAPE 2 SOLENOID CONTROL.
35	P54	T_MOTOR	Output	TAPE MOTOR CONTROL.
36	P53	PLAY SW A	Input	MICROCOMPUTER RESET.
37	P52	PLAY SW B	Input	PLAY SWITCH FOR TAPE 2.
38	P51	FPA	Input	TAPE 2 A-SIDE FULL PROOF.
39*	P50	FPB	Input	TAPE 2 B-SIDE FULL PROOF.
40	VSS0	VSS0	—	GND
41	VDD0	VDD0	Input	(+) POWER SUPPLY.
42	RESET	RESET	Input	RESET.
43	P47	RESOUT	Output	CD DSP RESET.
44	P46	RDS RST/ESS_ACK	Output	RAM RESET/ESS SYS ACKNOL.
45	P45	RDS RDDA/ESS_STB	Input	RANSMIT DATA INPUT/ESS STB.
46	P44	RDS RDCL/ESS_DI	Output	RDS CLOCK/ESS DATA OUTPUT.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC701 RH-iX0402AWZZ: System Microcomputer (IX0402AW) (2/2)

Pin No.	Port Name	Terminal Name	Input/Output	Function
47	P43	RDS READY/ESS DO	Input	READY/ESS DATA INPUT.
48*	P42	DSA ACK	Output	DSA ACKNOWLEDGE.
49*	P41	DSA DATA	Input	DSA DATA INPUT.
50*	P40	DSA STB	Input/Output	DSA STROBE.
51	P107	REC/PLAY	Output	TAPE REC/PLAY CHANGE.
52	P106	T T1/T2	Output	TAPE T1/T2 CHANGE.
53	P105	T BIAS	Output	TAPE RECORD BIAS.
54*	P104	CE 1	Output	CE OUTPUT AUDIO PRO 1.
55*	P103	CE 2	Output	CE OUTPUT AUDIO PRO 2.
56	P102	SPRLY	Output	SPEAKER RELAY.
57	P101	AC RLY	Output	AC RELAY CONTROL.
58	P100	LCK 0	Output	LED DRIVER CLOCK 0. (BU209)
59	P97	LCK 1	Output	LED DRIVER CLOCK 1. (BU209)
60	P96	-20dB ATT	Output	VOL -20dB ATTENUATOR.
61*	P95	SMUTE	Output	SYSTEM MUTE.
62	P94	DRF/DVD BUS 5	Input	CD DRF LEVEL DETECTION.
63	P93	JOG 0	Input	KEY JOG INPUT 0.
64	P92	JOG 1	Input	KEY JOG INPUT 1.
65*	P91	MIC SW	Input	MIC SWITCH.
66	P90	FL LATCH	Output	FL DRIVER CONTROL.
67*	P87	KARAOKE LATCH	Output	KARAOKE LATCH (WHEN NOT USED. CONNECT TO 0 V.)
68*	P86	MPEG_POW	Output	MPEG POW CONTROL.
69	P85	DIST IN	Input	DESTINATION INPUT.
70	FIP28	P1	Output	FL DISPLAY SEGMENT DRIVER.
		DIST 9	Output	VCD LOGO
71	FIP27	P2	Output	FL DISPLAY SEGMENT DRIVER.
		DIST 8	Output	VCD LOGO
72	FIP26	P3	Output	FL DISPLAY SEGMENT DRIVER.
		DIST 7	Output	PAL/NTSC
73	FIP25	P4	Output	FL DISPLAY SEGMENT DRIVER.
		DIST 6	Output	VIDEO 2 AND AC3 READY.
74	FIP24	P5	Output	FL DISPLAY SEGMENT DRIVER.
		DIST 5	Output	KEY CONTROL MODE.
75	FIP23	P6	Output	FL DISPLAY SEGMENT DRIVER.
		DIST 4	Output	KARAOKE MODE.
76	FIP22	P7	Output	FL DISPLAY SEGMENT DRIVER.
		DIST 3	Output	TAPE REVERSE.
77	FIP21	P8	Output	FL DISPLAY SEGMENT DRIVER.
		DIST 2	Output	ECO MODE.
78	FIP20	P9	Output	FL DISPLAY SEGMENT DRIVER.
		DIST 1	Output	CLOCK DESTINATION.
79	VDD2	VDD2	Input	VDD
80	VLOAD	VLOAD	Input	FL DRIVER (–) POWER SUPPLY.
81	FIP19	P10	Output	FL DISPLAY SEGMENT DRIVER.
		DIST 0	Output	TUNER DESTINATION.
82-84	FIP18-16	P11-P13	Output	FL DISPLAY SEGMENT DRIVER.
		SPEANA SEL A-C	Output	SPEANA SELECT A-C.
85-92	FIP15-FIP8	P14-P21	Output	FL DISPLAY SEGMENT DRIVER.
93-100	FIP7-FIP0	G1-G8	Output	FL DISPLAY GRID.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC601 VHiLC75341/-1: Audio Processor (LC75341)

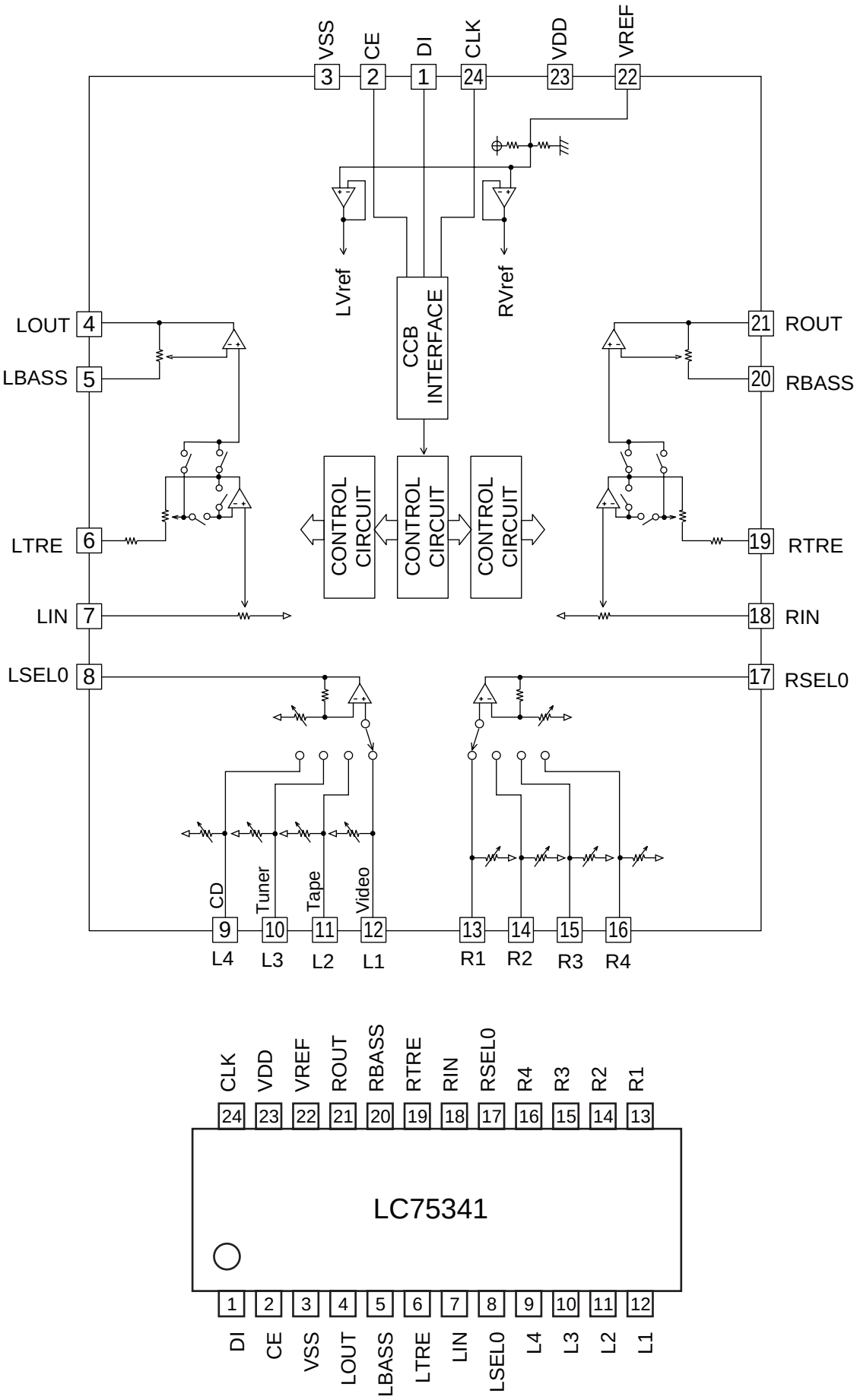


Figure 59 BLOCK DIAGRAM OF IC

WIRING OF PRIMARILY SUPPLY LEADS (FOR U.K. ONLY)

If any one of the bands shown in Fig. 60 is removed for some reason, be sure replace it to the original position and same appearance as before.

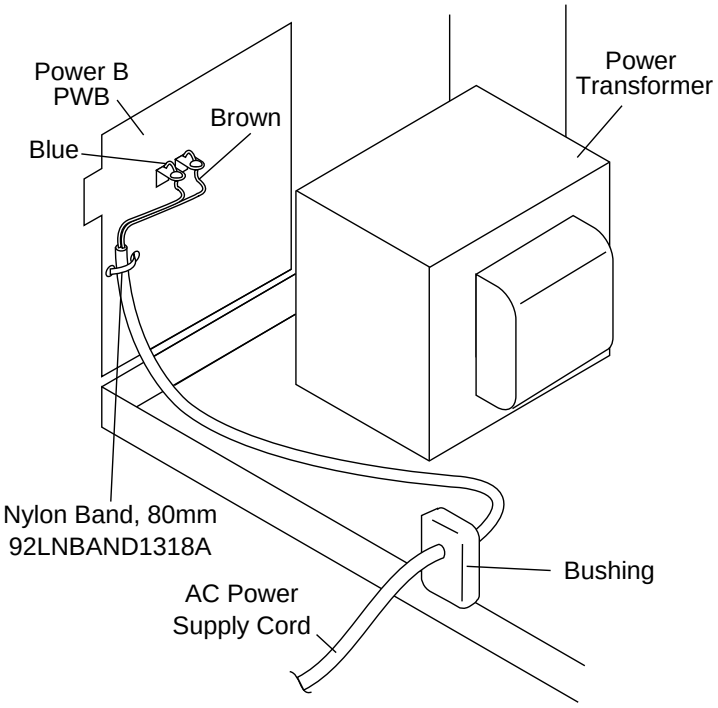
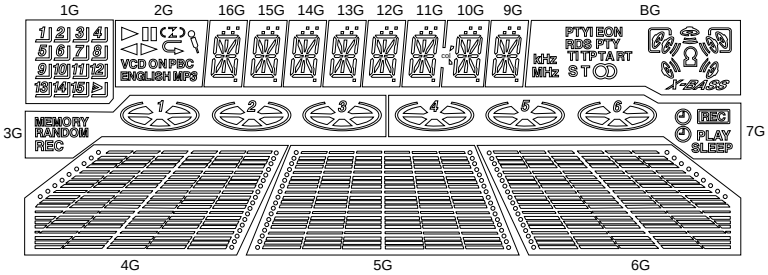
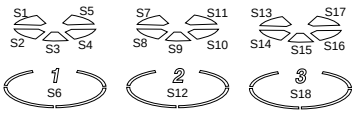


Figure 60

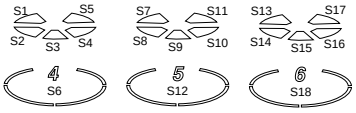
FL DISPLAY

FL701 VVKNA16LM17-1: FL Display

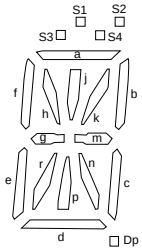




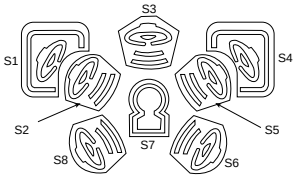
(3G)



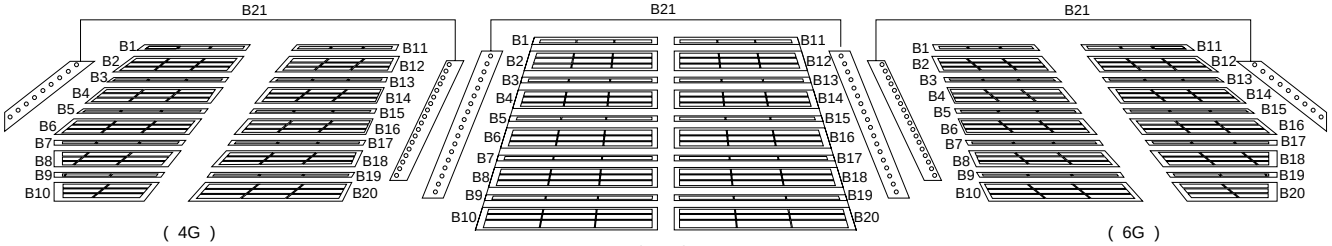
(7G)



(9G-16G)



(BG)



(4G) (5G) (6G)

PIN CONNECTION

PIN NO.	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
CONNECTION	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21	1G	2G	3G	4G	5G	6G	7G	8G	NP	F1	F1	F1

PIN NO.	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24
CONNECTION	P26	P25	P24	P23	P22	16G	15G	14G	13G	12G	11G	10G	9G	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10

PIN NO.	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47
CONNECTION	F2	F2	F2	NP	P41	P40	P39	P38	P37	P36	P35	P34	P33	P32	P31	P30	P29	P28	P27

Note
1) Fn: Filament pin
2) nG: Grid pin
3) Pn: Anede pin
4) NP: No pin

ANODE CONNECTION

	11G-16G	10G	9G	8G	7G	6G-4G	3G	2G	1G
P1	—	—	—	S1	S1	B1	S1	▷ (▯▯)	J1
P2	—	—	—	S2	S2	B2	S2	▯▯	J2
P3	—	—	—	S3	S3	B3	S3	☾	J3
P4	—	—	—	S4	S4	B4	S4	Σ	J4
P5	—	—	—	S5	S5	B5	S5	☽	J5
P6	—	—	—	S6	S6	B6	S6	⊂	J6
P7	—	—	—	S7	S7	B7	S7	◁	J7
P8	—	—	—	S8	S8	B8	S8	▷	J8
P9	—	—	—	kHz	S9	B9	S9	∿	J9
P10	—	—	—	MHz	S10	B10	S10	PBC	J10
P11	—	—	—	PTY1	S11	B11	S11	VCD ON	J11
P12	—	—	—	EON	S12	B12	S12	ENGLISH	J12
P13	—	—	—	RDS	S13	B13	S13	MP3	J13
P14	—	—	—	PTY	S14	B14	S14	—	J14
P15	—	—	—	TI	S15	B15	S15	—	J15
P16	—	—	—	TP	S16	B16	S16	—	J16
P17	—	—	—	TA	S17	B17	S17	—	—
P18	—	—	—	RT	S18	B18	S18	—	—
P19	—	—	—	S T	◔ REC	B19	MEMORY	—	—
P20	—	—	—	ⓞ	◔ PLAY	B20	RANDOM	—	—
P21	—	—	—	X-BASS	SLEEP	B21	REC	—	—
P22	S1	S1	S1	—	—	—	—	—	—
P23	S2	S2	S2	—	—	—	—	—	—
P24	S3	S3	S3	—	—	—	—	—	—
P25	S4	S4	S4	—	—	—	—	—	—
P26	a	a	a	—	—	—	—	—	—
P27	h	h	h	—	—	—	—	—	—
P28	j	j	j	—	—	—	—	—	—
P29	k	k	k	—	—	—	—	—	—
P30	b	b	b	—	—	—	—	—	—
P31	f	f	f	—	—	—	—	—	—
P32	—	col	—	—	—	—	—	—	—
P33	m	m	m	—	—	—	—	—	—
P34	g	g	g	—	—	—	—	—	—
P35	c	c	c	—	—	—	—	—	—
P36	e	e	e	—	—	—	—	—	—
P37	r	r	r	—	—	—	—	—	—
P38	p	p	p	—	—	—	—	—	—
P39	n	n	n	—	—	—	—	—	—
P40	d	d	d	—	—	—	—	—	—
P41	Dp	Dp	Dp	—	—	—	—	—	—

— M E M O —

SHARP PARTS GUIDE

MINI COMPONENT SYSTEM

MODEL CD-BA3100H

CD-BA3100H Mini Component System consisting of CD-BA3100H (main unit) and CP-BA3100H (speaker system).

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Explanation of capacitors/resistors parts codes

Capacitors

VCC ..... Ceramic type
VCK ..... Ceramic type
VCT ..... Semiconductor type
VC • • MF ..... Cylindrical type (without lead wire)
VC • • MN ..... Cylindrical type (without lead wire)
VC • • TV ..... Square type (without lead wire)
VC • • TQ ..... Square type (without lead wire)
VC • • CY ..... Square type (without lead wire)
VC • • CZ ..... Square type (without lead wire)
VC • • • • • • • • • J .. The 13th character represents capacity difference.
("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
"C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD ..... Carbon-film type
VRS ..... Carbon-film type
VRN ..... Metal-film type
VR • • MF ..... Cylindrical type (without lead wire)
VR • • MN ..... Cylindrical type (without lead wire)
VR • • TV ..... Square type (without lead wire)
VR • • TQ ..... Square type (without lead wire)
VR • • CY ..... Square type (without lead wire)
VR • • CZ ..... Square type (without lead wire)
VR • • • • • • • • • J .. The 13th character represents error.
("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

NOTE:
Parts marked with "⚠" are important for maintaining the safety of the set.
Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

CD-BA3100H

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION

CD-BA3100H

INTEGRATED CIRCUITS

IC1	VHILC78645E-1	J	AY	CD Servo,LC78645E
IC2	VHIM63001FP-1	J	AX	Focus/Tracking/Spin/Sled Driver, M63001FP
IC101	VHIAN7345K/-1	J	AM	Playback and Record/Playback Amp.,AN7345K
IC302	VHILC72131/-1	J	AP	PLL (Tuner),LC72131
IC303	VHILA1832S/-1	J	AN	FM IF Det./FM Mpx./AM IF, LA1832S
IC601	VHILC75341/-1	J	AM	Audio Processor,LC75341
IC701	RH-IX0402AWZZ	J	AZ	System Microcomputer, IX0402AW
IC702	VHID16315GB-1	J	AM	FL Display Driver,D16315GB
IC703	VHIBA3835F/-1	J	AS	5 Band Pass Filter,BA3835F
IC901,902	VHISTK40270N1	J	AY	Power Amp.,STK40270N
ICT21	VHILC72723/-1	J	AR	RDS Decorder,LC72723

TRANSISTORS

Q1	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q2	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q3~12	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q103~106	VS2SC1845F/-1	J	AC	Silicon,NPN,2SC1845 F
Q107,108	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q109	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q110,111	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q121,122	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q124	VS2SA1015GR-1	J	AB	Silicon,PNP,2SA1015 GR
Q126	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q128	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q301	VS2SC380-O/-1	J	AC	Silicon,NPN,2SC380 O
Q360	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q603,604	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q701~703	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q704~706	VSKTA1273Y/-1	J	AE	Silicon,PNP,KTA1273 Y
Q707	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q708,709	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q801	VSKTA1274Y/-1	J	AE	Silicon,PNP,KTA1274 Y
Q802	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q821	VHIAN78L05/-1	J	AE	Constant Voltage Regulator, AN78L05
Q850	VSKTC2026//-1	J	AF	Silicon,NPN,KTC2026
Q851	VHIKIA7810AP1	J	AF	Voltage Regulator,KIA7810AP
Q852	VHIKIA7805AP1	J	AF	Constant Voltage Regulator, KIA7805AP
Q901~909	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q910	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q990	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q991	VSKRA107M//-1	J	AE	Digital,PNP,KRA107 M
QT21	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR

DIODES

D301~304	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D601,602	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D702	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D710~718	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D801A,B	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D802,803	VHDTS6B04GM-1	J	AP	Silicon,TS6B04GM
D804~809	VHDDS1N404S-1	J	AB	Silicon,DS1N404S
D811	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D812~815	VHDDS1N404S-1	J	AB	Silicon,DS1N404S
D818	VHDDS1N404S-1	J	AB	Silicon,DS1N404S
D819~821	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D822	VHDDS1N404S-1	J	AB	Silicon,DS1N404S
D901~907	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D909	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
DZ801	VHEDZ2R4BSB-1	J	AB	Zener,2.4V,DZ2.4BSB
LED701	VHP4204SRT121	J	AD	LED,Red,4204SRT121
LED710,711	VHP4204UYT121	J	AD	LED,Yellow,4204UYT121
ZD1	VHEDZ3R3BSB-1	J	AB	Zener,3.3V,DZ3.3BSB
ZD2	VHEDZ3R9BSB-1	J	AC	Zener,3.9V,DZ3.9BSB
ZD351	VHEDZ5R1BSB-1	J	AC	Zener,5.1V,DZ5.1BSB
ZD801	VHEDZ300BSC-1	J	AB	Zener,30V,DZ30BSC
ZD802	VHEDZ6R2BSA-1	J	AB	Zener,6.2V,DZ6.2BSA
ZD806	VHEDZ110BSB-1	J	AB	Zener,11V,DZ11BSB
ZDT21	VHEDZ5R1BSB-1	J	AC	Zener,5.1V,DZ5.1BSB

FILTERS

CF301,302	RFILF0072AFZZ	J	AG	FM IF
CF351	RFILF0003AWZZ	J	AK	FM IF
CF352	RFILA0009AWZZ	J	AE	AM IF

TRANSFORMERS

	T303	RCILA0052AWZZ	J	AE	AM Tracking
	T306	RCILB0067AWZZ	J	AD	AM OSC.
	T351	RCILI0019AWZZ	J	AD	AM IF
⚠	T801	RTRNP0358AWZZ	J	BG	Power,Main
⚠	T802	RTRNP0313AWZZ	J	AN	Power,Sub

COILS

L2	VP-XHR82K0000	J	AC	0.82 µH
L104	VP-MK331K0000	J	AB	330 µH,Choke
L341	RBLN-0002AWZZ	J	AE	Balum
L342	VP-DH2R2K0000	J	AB	2.2 µH,Peaking
L351,352	VP-DH101K0000	J	AB	100 µH,Choke
L354	RFILL0001AWZZ	J	AE	Low Pass Filter
L601	VP-DH2R2K0000	J	AB	2.2 µH,Peaking
L801	RCILZ0022AWZZ	J	AG	Line Filter
L902~905	RCILZ0137AFZZ	J	AA	0.29 µH
LT21,22	VP-XH2R2K0000	J	AB	2.2 µH,Choke

VARIABLE CAPACITOR

VD301	VHCSVC348S/-1	J	AK	Variable Capacitance,SVC348S

VIBRATORS

X1	RCRM-0041AWZZ	J	AF	Ceramic,33.8688 MHz
X351	92LCRSTL1425A	J	AF	Crystal,456 kHz
X352	RCRSP0019AWZZ	J	AF	Crystal,4.5 MHz
XL701	RCRSP0026AWZZ	J	AG	Crystal,4.194304 MHz
XT21	RCRSP0018AWZZ	J	AG	Crystal,4.332 MHz

CAPACITORS

C1	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C2	VCTYPA1CX103K	J	AA	0.01 µF,16V
C3	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C4	VCKYPA1HB102K	J	AA	0.001 µF,50V
C5	VCTYPA1CX473K	J	AA	0.047 µF,16V
C6	VCTYPA1CX104K	J	AB	0.1 µF,16V
C8	VCKYPU1HB472K	J	AA	0.0047 µF,50V
C9	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C10	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C11	VCEAZA1HW224M	J	AB	0.22 µF,50V,Electrolytic
C12	VCKYPA1HB101K	J	AA	100 pF,50V
C13	VCTYPA1CX103K	J	AA	0.01 µF,16V
C14	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C15	VCEAZA1CW227M	J	AC	220 µF,16V,Electrolytic
C16	VCTYPA1CX473K	J	AA	0.047 µF,16V
C17	VCEAZA1CW477M	J	AC	470 µF,16V,Electrolytic
C18	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C23	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C24	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C25	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C27	VCKYPU1HB472K	J	AA	0.0047 µF,50V
C28	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C29	VCEAZA0JW337M	J	AC	330 µF,6.3V,Electrolytic
C30	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C31	VCKYPU1HB472K	J	AA	0.0047 µF,50V
C32	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C37	VCTYPA1CX473K	J	AA	0.047 µF,16V
C38	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C39	VCTYPA1CX104K	J	AB	0.1 µF,16V
C40	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C41~47	VCKYPA1HB101K	J	AA	100 pF,50V
C48	VCTYPA1CX103K	J	AA	0.01 µF,16V
C51	VCKYBT1HB102K	J	AA	0.001 µF,50V
C52	VCTYPA1CX103K	J	AA	0.01 µF,16V
C53	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C54	VCCCPA1HH220J	J	AA	22 pF (CH),50V
C55,56	VCKYPA1HB102K	J	AA	0.001 µF,50V
C101,102	VCKYMN1HB561K	J	AA	560 pF,50V
C105	VCKYBT1HB181K	J	AA	180 pF,50V
C106	VCKYMN1HB181K	J	AA	180 pF,50V

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C107,108	VCKYMN1HB561K	J	AA	560 pF,50V
C111~114	VCKYMN1HB331K	J	AA	330 pF,50V
C115,116	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C117,118	VCTYPA1EX333K	J	AA	0.033 µF,25V
C119,120	VCKYMN1HB561K	J	AA	560 pF,50V
C121,122	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C123,124	VCTYMN1CX222K	J	AA	0.0022 µF,16V
C127	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C128	VCEAZA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C131,132	VCKYMN1HB271K	J	AA	270 pF,50V
C133,134	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C135,136	VCTYPA1CX223K	J	AA	0.022 µF,16V
C139,140	VCTYMN1CX332K	J	AA	0.0033 µF,16V
C141,142	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C145	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C146	VCEAZA1AW227M	J	AC	220 µF,10V,Electrolytic
C150	VCQPKA2AA822J	J	AA	0.0082 µF,100V,Polypropylene
C151	VCQYKA1HM393K	J	AB	0.039 µF,50V,Mylar
C152	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C153	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C154	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C155	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C156	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C157	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C158	VCKYMN1HB102K	J	AA	0.001 µF,50V
C301	VCTYMN1EF103Z	J	AB	0.01 µF,25V
C302	VCKYMN1HB102K	J	AA	0.001 µF,50V
C321	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C323	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C330	VCCSMN1HL150J	J	AA	15 pF,50V
C331	VCKYPA1HF473Z	J	AB	0.047 µF,50V
C332	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C334	VCCCMN1HH220J	J	AA	22 pF (CH),50V
C335	VCKYMN1HB561K	J	AA	560 pF,50V
C338	VCKYMN1HB102K	J	AA	0.001 µF,50V
C341,342	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C345~347	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C348	VCTYMN1EF103Z	J	AB	0.01 µF,25V
C352	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C353,354	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C355	VCCSMN1HL220J	J	AA	22 pF,50V
C356	VCKYMN1HB102K	J	AA	0.001 µF,50V
C357	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C358	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C359	VCTYBT1EF223Z	J	AA	0.022 µF,25V
C361	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C362	VCEAZA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C363	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C364	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C365	VCTYPA1CX223K	J	AA	0.022 µF,16V
C366	VCKYMN1HB102K	J	AA	0.001 µF,50V
C367,368	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C369	VCCUMN1HJ270J	J	AA	27 pF (UJ),50V
C370~372	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C373,374	VCTYPA1CX183K	J	AA	0.018 µF,16V
C380	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C381	VCCCMN1HH120J	J	AA	12 pF (CH),50V
C382	VCCCMN1HH150J	J	AA	15 pF (CH),50V
C384	VCKYMN1HB102K	J	AA	0.001 µF,50V
C385	VCTYMN1CY103N	J	AA	0.01 µF,16V
C386	VCKYMN1HB331K	J	AA	330 pF,50V
C387	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C388	VCKYMN1HB102K	J	AA	0.001 µF,50V
C391	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C392	VCKYMN1HB102K	J	AA	0.001 µF,50V
C393	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C394	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C395	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C396	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C397	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C398	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C399	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C602	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C604	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C606	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C607~610	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C611,612	VCQYKA1HM272K	J	AA	0.0027 µF,50V,Mylar
C613,614	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C617	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C619~630	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C631,632	VCKYMN1HB391K	J	AA	390 pF,50V
C634	VCKYMN1HB102K	J	AA	0.001 µF,50V
C639,640	VCKYMN1HB101K	J	AA	100 pF,50V
C651~653	VCKYPA1HB221K	J	AA	220 pF,50V
C701	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C702	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C703	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C704	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C705	RC-EZD476AF1E	J	AC	47 µF,25V,Electrolytic
C706	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C707~710	VCKYBT1HF104Z	J	AC	0.1 µF,50V
C711	VCCSMN1HL180J	J	AA	18 pF,50V
C712	VCCSMN1HL150J	J	AA	15 pF,50V
C713	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C714	VCEAZA1AW227M	J	AC	220 µF,10V,Electrolytic
C715	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C716,717	VCKYMN1HB102K	J	AA	0.001 µF,50V
C722	RC-EZD335AF1H	J	AB	3.3 µF,50V,Electrolytic
C723,724	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C725	RC-EZD476AF1E	J	AC	47 µF,25V,Electrolytic
C726	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C727	VCTYMN1CX152K	J	AA	0.0015 µF,16V
C801,802	VCEAZW1HW228M	J	AH	2200 µF,50V,Electrolytic
C803~806	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C807,808	VCEAZA1HW107M	J	AC	100 µF,50V,Electrolytic
C809	VCEAZA1HW227M	J	AC	220 µF,50V,Electrolytic
C810,811	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C812	VCEAZA1VW107M	J	AC	100 µF,35V,Electrolytic
C813,814	RC-EZ0063AWZZ	J	AM	2200/63,Electrolytic
C817	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C818	VCEAZV1VW477M	J	AD	470 µF,35V,Electrolytic
C819	VCEAZA0JW108M	J	AC	1000 µF,6.3V,Electrolytic
C825	VCEAZA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C829	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C830	VCEAZA0JW108M	J	AC	1000 µF,6.3V,Electrolytic
⚠ C831	RC-KZ002LAWZZ	J	AC	0.0047 µF,250V,Ceramic
C832,833	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C850	VCEAZW1VW228M	J	AH	2200 µF,35V,Electrolytic
C851	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C852	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C855	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C857	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C858	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C860	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C861	VCEAZW1CW478M	J	AG	4700 µF,16V,Electrolytic
C892	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C901,902	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C903,904	VCEAZA1HW107M	J	AC	100 µF,50V,Electrolytic
C905	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C906,907	VCTYPA1EX152K	J	AA	0.0015 µF,25V
C908	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C909,910	VCCSPA1HL150J	J	AA	15 pF,50V
C911	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C912	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C914	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C916~919	VCFYHA1HA224J	J	AC	0.22 µF,50V,Thin Film
C920,921	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C922,923	VCEAZA1HW107M	J	AC	100 µF,50V,Electrolytic
C924,925	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C926,927	VCTYPA1EX152K	J	AA	0.0015 µF,25V
C928,929	VCCSPA1HL150J	J	AA	15 pF,50V
C930,931	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C932	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C935,936	VCFYHA1HA224J	J	AC	0.22 µF,50V,Thin Film
C938	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C939,940	VCFYHA1HA224J	J	AC	0.22 µF,50V,Thin Film
C941,942	VCQYKA1HM153K	J	AB	0.015 µF,50V,Mylar
C943,944	VCKYPA1HB102K	J	AA	0.001 µF,50V
C954,955	VCQYKA1HM823K	J	AC	0.082 µF,50V,Mylar
C958,959	VCEAZA1HW224M	J	AB	0.22 µF,50V,Electrolytic
C960,961	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C962~977	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C979~982	VCKYPA1HB102K	J	AA	0.001 µF,50V
C983	VCKYPA1HB222K	J	AA	0.0022 µF,50V
C985	VCKYPA1HB222K	J	AA	0.0022 µF,50V
C987	VCKYPA1HB222K	J	AA	0.0022 µF,50V
C989	VCKYPA1HB222K	J	AA	0.0022 µF,50V
C990,991	VCEAZA1HW224M	J	AB	0.22 µF,50V,Electrolytic
CT21	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
CT22	VCTYMN1EF223Z	J	AA	0.022 µF,25V
CT23	VCCCMN1HH220J	J	AA	22 pF (CH),50V
CT24	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
CT25	VCCCMN1HH220J	J	AA	22 pF (CH),50V
CT26	VCKYMN1HB561K	J	AA	560 pF,50V

CD-BA3100H

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
CT27~30	VCTYMN1EF223Z	J	AA	0.022 µF,25V
CT31	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
CT32	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic

RESISTORS

	VRD-MN2BD000C	J	AA	0 ohm,Jumper,ø1.4×3.5mm,Ivory
R1	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R2,3	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
R4	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R5,6	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
R7	VRD-ST2CD470J	J	AA	47 ohms,1/6W
R8	VRD-ST2CD3R3J	J	AA	3.3 ohms,1/6W
R9	VRD-ST2CD273J	J	AA	27 kohms,1/6W
R10	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R11	VRD-ST2CD331J	J	AA	330 ohms,1/6W
R12	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R13~19	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R21	VRD-ST2CD221J	J	AA	220 ohms,1/6W
R22	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R23	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R24	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R25	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R26	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R27,28	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R29~36	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R37,38	VRD-ST2CD681J	J	AA	680 ohms,1/6W
R39	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R40	VRD-ST2CD122J	J	AA	1.2 kohms,1/6W
R41	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
R42	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R43	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
R44	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R45	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
R46	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R47	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
R48	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R49	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
R50	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R52	VRD-ST2CD221J	J	AA	220 ohms,1/6W
R53	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R54~63	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R64	VRD-ST2EE1R0J	J	AA	1 ohm,1/4W
R65	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
R101	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R102	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R103,104	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R105,106	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R107,108	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R109,110	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R111,112	VRD-MN2BD153J	J	AA	15 kohms,1/8W
R113,114	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R115	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R117,118	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R119	VRD-ST2CD560J	J	AA	56 ohms,1/6W
R120	VRD-MN2BD560J	J	AA	56 ohms,1/8W
R121,122	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R123,124	VRD-MN2BD272J	J	AA	2.7 kohms,1/8W
R125,126	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R131,132	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R134	VRD-MN2BD683J	J	AA	68 kohms,1/8W
R135,136	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R137	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
R138	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R139,140	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R141,142	VRD-MN2BD101J	J	AA	100 ohm,1/8W
R145,146	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R153,154	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R155	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R156	VRD-ST2CD224J	J	AA	220 kohms,1/6W
R157	VRD-MN2BD224J	J	AA	220 kohms,1/8W
R158	VRD-ST2EE221J	J	AA	220 ohms,1/4W
R160	VRD-RT2HD820J	J	AA	82 ohms,1/2W
R162	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R164	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R166	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R167	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R168	VRD-ST2CD4R7J	J	AA	4.7 ohms,1/6W
R169~174	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R323	VRD-MN2BD683J	J	AA	68 kohms,1/8W
R336	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R344	VRD-MN2BD471J	J	AA	470 ohms,1/8W
R345	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R346	VRD-MN2BD331J	J	AA	330 ohms,1/8W
R347	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
R348	VRD-MN2BD681J	J	AA	680 ohms,1/8W
R349	VRD-MN2BD330J	J	AA	33 ohms,1/8W
R350	VRD-MN2BD272J	J	AA	2.7 kohms,1/8W
R351	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R352	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R353	VRD-MN2BD271J	J	AA	270 ohms,1/8W
R355	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R356	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R357	VRD-ST2CD474J	J	AA	470 kohms,1/6W
R358	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R359	VRD-MN2BD182J	J	AA	1.8 kohms,1/8W
R360	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R365	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R369	VRD-MN2BD150J	J	AA	15 ohms,1/8W
R370	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R372~374	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R376	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R377	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R378	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R379	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R380	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R381	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R382	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R383	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R384	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R385	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R386	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R387	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R388	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R391,392	VRD-ST2EE271J	J	AA	270 ohms,1/4W
R393	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R395	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R399	VRD-MN2BD330J	J	AA	33 ohms,1/8W
R601,602	VRD-ST2CD680J	J	AA	68 ohms,1/6W
R605,606	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R607	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R608	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R609,610	VRD-ST2CD331J	J	AA	330 ohms,1/6W
R611	VRD-MN2BD273J	J	AA	27 kohms,1/8W
R612	VRD-ST2CD273J	J	AA	27 kohms,1/6W
R613,614	VRD-MN2BD391J	J	AA	390 ohms,1/8W
R615,616	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R619	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R625,626	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R631,632	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
R633,634	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R637,638	VRD-MN2BD184J	J	AA	180 kohms,1/8W
R641~643	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R700	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R701,702	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R703	VRD-MN2BD823J	J	AA	82 kohms,1/8W
R704~706	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R707	VRD-MN2BD330J	J	AA	33 ohms,1/8W
R708~710	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R711	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R712	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R713~717	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R718~730	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R731	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R732	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R733~736	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R737,738	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R739	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R740	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R741	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R742	VRD-ST2CD182J	J	AA	1.8 kohms,1/6W
R743	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R744	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R745	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R746,747	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R749~754	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R758,759	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R760	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R761,762	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R763~765	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R766	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R767	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R769	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R770,771	VRD-MN2BD101J	J	AA	100 ohm,1/8W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R773	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R779~781	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R783	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R784	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R785	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R786~788	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R790~795	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R797	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R798	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R799	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R801	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R802	VRD-ST2EE100J	J	AA	10 ohm,1/4W
R803	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R804	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R805	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R806	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R807	VRD-ST2CD221J	J	AA	220 ohms,1/6W
R808	VRD-ST2CD151J	J	AA	150 ohms,1/6W
R809	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R815	VRD-ST2CD224J	J	AA	220 kohms,1/6W
R816	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R817	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R819	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R826	VRD-ST2CD224J	J	AA	220 kohms,1/6W
R827	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R828	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R829,830	VRD-ST2EE470J	J	AA	47 ohms,1/4W
R836	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R852	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R853	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R854	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R856	VRD-ST2EE561J	J	AA	560 ohms,1/4W
⚠ R901	VRG-ST2EC101J	J	AB	100 ohm,1/4W,Fusible
R902	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R903,904	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R906,907	VRD-ST2CD561J	J	AA	560 ohms,1/6W
R908,909	VRD-ST2CD102J	J	AA	1 kohm,1/6W
⚠ R910	VRG-ST2EC101J	J	AB	100 ohm,1/4W,Fusible
R911,912	VRN-VV3AAR10J	J	AB	0.1 ohm,1W
R913,914	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R915,916	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R917,918	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R919~921	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R922,923	VRD-ST2EE4R7J	J	AA	4.7 ohms,1/4W
⚠ R924,925	VRG-ST2EC101J	J	AB	100 ohm,1/4W,Fusible
R926	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R927,928	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R929,930	VRD-ST2CD821J	J	AA	820 ohms,1/6W
R931,932	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R933,934	VRN-VV3AAR10J	J	AB	0.1 ohm,1W
R935,936	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R937,938	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R939~941	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R942,943	VRD-ST2EE4R7J	J	AA	4.7 ohms,1/4W
R944~947	VRD-RT2HD271J	J	AA	270 ohms,1/2W
R948~951	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R952	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R953	VRD-ST2CD683J	J	AA	68 kohms,1/6W
R954	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R955	VRD-RT2HD4R7J	J	AA	4.7 ohms,1/2W
R956,957	VRD-ST2CD183J	J	AA	18 kohms,1/6W
R966,967	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R970~975	VRD-ST2CD683J	J	AA	68 kohms,1/6W
R976,977	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R979	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R980	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R981~988	VRD-ST2EE6R8J	J	AA	6.8 ohms,1/4W
R993~996	VRN-VV3DAR22J	J	AC	0.22 ohms,2W
R997,998	VRD-ST2CD273J	J	AA	27 kohms,1/6W
RD01	VRD-ST2CD681J	J	AA	680 ohms,1/6W
RD02	VRD-ST2CD821J	J	AA	820 ohms,1/6W
RD03	VRD-MN2BD102J	J	AA	1 kohm,1/8W
RD04	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
RD05	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
RD06	VRD-MN2BD272J	J	AA	2.7 kohms,1/8W
RD07	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
RD08	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
RD09	VRD-MN2BD103J	J	AA	10 kohm,1/8W
RD10	VRD-MN2BD153J	J	AA	15 kohms,1/8W
RD11	VRD-MN2BD333J	J	AA	33 kohms,1/8W
RD12	VRD-MN2BD104J	J	AA	100 kohm,1/8W
RD13	VRD-ST2CD681J	J	AA	680 ohms,1/6W
RD14	VRD-MN2BD821J	J	AA	820 ohms,1/8W
RD15	VRD-MN2BD102J	J	AA	1 kohm,1/8W
RD16	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
RD17	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
RD18	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
RD19	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
RD20	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
RD21	VRD-MN2BD103J	J	AA	10 kohm,1/8W
RD22	VRD-MN2BD153J	J	AA	15 kohms,1/8W
RD25	VRD-MN2BD681J	J	AA	680 ohms,1/8W
RD26	VRD-MN2BD182J	J	AA	1.8 kohms,1/8W
RD28	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
RD29	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
RD30	VRD-MN2BD272J	J	AA	2.7 kohms,1/8W
RD31	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
RD32	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
RD33	VRD-MN2BD103J	J	AA	10 kohm,1/8W
RD34	VRD-MN2BD153J	J	AA	15 kohms,1/8W
RD35	VRD-MN2BD333J	J	AA	33 kohms,1/8W
RS701,702	VRD-ST2CD102J	J	AA	1 kohm,1/6W
RS709,710	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
RT21	VRD-ST2CD103J	J	AA	10 kohm,1/6W
RT22	VRD-ST2EE151J	J	AA	150 ohms,1/4W
RT24	VRD-MN2BD563J	J	AA	56 kohms,1/8W
RT25	VRD-MN2BD103J	J	AA	10 kohm,1/8W
RT26	VRD-MN2BD563J	J	AA	56 kohms,1/8W
RT27~30	VRD-MN2BD102J	J	AA	1 kohm,1/8W
RT31	VRD-ST2CD103J	J	AA	10 kohm,1/6W
RT32	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W

OTHER CIRCUITRY PARTS

BI601/CNS601	QCNWN1850AWZZ	J	AF	Connector Ass'y,6/6Pin
BI701/CNS905	QCNWN1846AWZZ	J	AH	Connector Ass'y,8/8Pin
BI702/CNS702	QCNWN1847AWZZ	J	AD	Connector Ass'y,2/2Pin
BI703A/B	QCNWN1848AWZZ	J	AD	Connector Ass'y,2/2Pin
BI704/CNS704	QCNWN1849AWZZ	J	AK	Connector Ass'y,12/12Pin
BI901/CNS901	QCNWN1851AWZZ	J	AG	Connector Ass'y,7/7Pin
BI902/CNS902	QCNWN1852AWZZ	J	AF	Connector Ass'y,5/5Pin
⚠ BI903/CNS903	QCNWN1854AWZZ	J		Connector Ass'y,4/4Pin
CNP1	QCNCM704GAWZZ	J	AC	Plug,7Pin
CNP2	QCNCM704HAWZZ	J	AC	Plug,8Pin
CNP3	92LCONE6P53253	J	AC	Plug,6Pin
CNP3A	92LCONE6P53254	J	AC	Plug,6Pin
CNP4	92LCONE4P53254	J	AC	Plug,4Pin
CNP5	QCNCW026DAWZZ	J	AC	Plug,4Pin
CNP6	QCNCW026HAWZZ	J	AC	Plug,8Pin
CNP7	QCNCM932MAFZZ	J	AE	Plug,12Pin
CNP8	92LCONE6P53254	J	AC	Plug,6Pin
CNP101	QCNCM705CAFZZ	J	AA	Plug,3Pin
CNP102	QCNCM705GAFZZ	J	AB	Plug,7Pin
CNP302	92LCONE2P5268	J	AB	Plug,2Pin
CNP602	QCNCWZG23AWZZ	J	AK	Socket,23Pin
CNP701	QCNCWZY08AWZZ	J	AC	Socket,8Pin
CNP702	QCNCWZF23AWZZ	J	AK	Socket,23Pin
CNP704	92LCONE2P53254	J	AB	Plug,2Pin
CNP806	QCNCW010JAWZZ	J	AC	Plug,9Pin
CNP901	92LCONE7P53253	J	AC	Plug,7Pin
CNP902	92LCONE5P5267X	J	AB	Plug,5Pin
CNP903	92LCONE4P53253	J	AB	Plug,4Pin
CNP904	92LCONE2P53253	J	AB	Plug,2Pin
CNP905	92LCONE9P53253	J	AC	Plug,9Pin
CNP906	QCNCM010JAWZZ	J	AC	Plug,9Pin
CNP907	92LCONE2P53253	J	AB	Plug,2Pin
CNS1A/B	QCNWN1981AWZZ	J	AF	Connector Ass'y,7/7Pin
CNS2A/B	QCNWN1982AWZZ	J	AG	Connector Ass'y,8/8Pin
CNS3A/B	QCNWN1980AWZZ	J	AF	Connector Ass'y,6/6Pin
CNS4	QCNWN1983AWZZ	J	AD	Connector Ass'y,4Pin
CNS904	QCNWN1841AWZZ	J	AD	Connector Ass'y,2Pin
CNS907	QCNWN1955AWZZ	J	AD	Connector Ass'y,2Pin
⚠ F800,801	QFS-D402CAWNI	J	AC	Fuse,T4A L 250V
⚠ F802,803	QFS-D502CAWNI	J	AC	Fuse,T5A L 250V
⚠ F804,805	QFS-D202CAWNI	J	AC	Fuse,T2A L 250V
FE301	RTUNS0012AWZZ	J	AV	FM Front End
FFC701	QCNWN1838AWZZ	J	AD	Flat Cable,8Pin
FFC702	QCNWN1859AWZZ	J		Flat Cable,23Pin
FL701	VVKNA16LM17-1	J	BC	FL Display
FW2	QCNWN1691AWZZ	J	AD	Flat Wire,8Pin
FW3	QCNWN1693AWZZ	J	AC	Flat Wire,4Pin
FW901	QCNWN1853AWZZ	J	AD	Flat Wire,5Pin
JK601	QSOCJ0219AWZZ	J	AD	Jack,Video/AUX In
JK670	QJAKM0004AWZZ	J	AK	Jack,Headphones

CD-BA3100H

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
JOG701	QSW-Z0014AWZZ	J	AF	Switch,Jog Type [Jog Volume]
⚠ K801,802	92LLUG1746A	J	AA	Lug,Terminal
LG901	QLUGP0001AWZZ	J	AC	Lug
M901/902	RMOTV0027AWZZ	J	AM	Motor,Air Cooling Fan
MOB1	92LMTR3435DASY	J	AM	Main Cam Motor Ass'y
MOB2	92LMTR3435DASY	J	AM	Tray Motor Ass'y
NM1	92LMTR2996CASY	J	AS	Motor with Chassis [Spindle]
NM2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]
NSW1	QSW-F9001AW01	J	AD	Switch,Push Type [Pickup In]
⚠ RL801	RRLYD0011AWZZ	J	AE	Relay
RX701	VHLN63H380A-1	J	AK	Remote Sensor,N63H380A
RY901,902	RRLYD0016AWZZ	J	AH	Relay
SO301A	QTANC0101AWZZ	J	AF	Terminal,FM Antenna
SO901	QTANA0810AWZZ	J	AF	Terminal,Speaker
SW701	92LSWICH1401AT	J	AC	Switch,Key Type [On/Stand-by]
SW702	92LSWICH1401AT	J	AC	Switch,Key Type [PTY]
SW703	92LSWICH1401AT	J	AC	Switch,Key Type [EON]
SW704	92LSWICH1401AT	J	AC	Switch,Key Type [ASPM]
SW705	92LSWICH1401AT	J	AC	Switch,Key Type [Display Mode]
SW706	92LSWICH1401AT	J	AC	Switch,Key Type [Disc 1 Play]
SW707	92LSWICH1401AT	J	AC	Switch,Key Type [Disc 2 Play]
SW708	92LSWICH1401AT	J	AC	Switch,Key Type [Disc 3 Play]
SW709	92LSWICH1401AT	J	AC	Switch,Key Type [Disc 4 Play]
SW710	92LSWICH1401AT	J	AC	Switch,Key Type [Disc 5 Play]
SW711	92LSWICH1401AT	J	AC	Switch,Key Type [Disc 6 Play]
SW712	92LSWICH1401AT	J	AC	Switch,Key Type [Disc 5 Eject]
SW713	92LSWICH1401AT	J	AC	Switch,Key Type [Disc 6 Eject]
SW714	92LSWICH1401AT	J	AC	Switch,Key Type [Dimmer]
SW715	92LSWICH1401AT	J	AC	Switch,Key Type [CD]
SW716	92LSWICH1401AT	J	AC	Switch,Key Type [Tape]
SW717	92LSWICH1401AT	J	AC	Switch,Key Type [Tuner]
SW718	92LSWICH1401AT	J	AC	Switch,Key Type [Video/Aux]
SW719	92LSWICH1401AT	J	AC	Switch,Key Type [Memory]
SW720	92LSWICH1401AT	J	AC	Switch,Key Type [Equalizer]
SW721	92LSWICH1401AT	J	AC	Switch,Key Type [Disc 1 Eject]
SW722	92LSWICH1401AT	J	AC	Switch,Key Type [Disc 2 Eject]
SW723	92LSWICH1401AT	J	AC	Switch,Key Type [Disc 3 Eject]
SW724	92LSWICH1401AT	J	AC	Switch,Key Type [Disc 4 Eject]
SW727	92LSWICH1401AT	J	AC	Switch,Key Type [Rewind]
SW728	92LSWICH1401AT	J	AC	Switch,Key Type [Fast Forward]
SW729	92LSWICH1401AT	J	AC	Switch,Key Type [Stop]
SW732	92LSWICH1401AT	J	AC	Switch,Key Type [Play]
SW733	92LSWICH1401AT	J	AC	Switch,Key Type [Clock]
SW734	92LSWICH1401AT	J	AC	Switch,Key Type [Timer]
SW735	92LSWICH1401AT	J	AC	Switch,Key Type [Tuner Up]
SW736	92LSWICH1401AT	J	AC	Switch,Key Type [Tuner Down]
SW737	92LSWICH1401AT	J	AC	Switch,Key Type [REC/Pause]
SW738	92LSWICH1401AT	J	AC	Switch,Key Type [X-Bass]
SWB101	QSW-P9005AWZZ	J	AD	Switch,Push Type [Disc Detect 1]
SWB102	QSW-P9005AWZZ	J	AD	Switch,Push Type [Disc Detect 2]
SWB103	QSW-P9005AWZZ	J	AD	Switch,Push Type [Disc Detect 3]
SWB104	QSW-P9003AWZZ	J	AD	Switch,Push Type [Mode 1]
SWB105	QSW-P9003AWZZ	J	AD	Switch,Push Type [Mode 2]
SWB106	QSW-P9003AWZZ	J	AD	Switch,Push Type [Mode 3]
SWB107	QSW-P9003AWZZ	J	AD	Switch,Push Type [Mode 4]
SWB108	QSW-P9003AWZZ	J	AD	Switch,Push Type [Mode 5]
SWB109	QSW-P9004AWZZ	J	AE	Switch,Push Type [Tray 1]
SWB110	QSW-P9004AWZZ	J	AE	Switch,Push Type [Tray 2]
WT601	QCNCW012EAWZZ	J	AC	Socket,5Pin

CD MECHANISM PARTS

301	NGERH0011AWZZ	J	AC	Gear,Middle
302	NGERH0012AWZZ	J	AC	Gear,Drive
303	MLEVP0080AWZZ	J	AC	Rail,Guide
304	NSFTM0020AWFW	J	AD	Shaft,Guide
305	92LMCUSN1524A	J	AD	Cushion
⚠ 306	92LHPC1LXASY	J	BD	Pickup Unit Ass'y
306- 1	————		—	Pickup Unit (Not Replacement Item)
306- 2	NGERR0043AFZZ	J	AC	Gear,Rack
306- 3	MSPRC0961AFZZ	J	AA	Spring,Rack
307	PCUSG0001AWSA	J	AD	Cushion
308	PCUSG0004AWSA	J	AD	Cushion
701	XBSSD26P06000	J	AA	Screw,ø2.6×6mm
702	XHBSD20P05000	J	AA	Screw,ø2×5mm
703	XBBSD20P03000	J	AA	Screw,ø2×3mm
704	LX-WZ1070AFZZ	J	AA	Washer,ø1.5×ø3.8×0.25mm
NM1	92LMTR2996CASY	J	AS	Motor with Chassis [Spindle]
NM2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]
NSW1	QSW-F9001AW01	J	AD	Switch,Push Type [Pickup In]

CD CHANGER MECHANISM PARTS

101	LCHSM0106AWZZ	J	AQ	Main Base
102	PGIDM0033AWZZ	J	AH	Change Box,L
103	PGIDM0034AWZZ	J	AG	Change Box,R
104	NGERH0121AWZZ	J	AC	Gear,STB B
105	PGIDM0035AWZZ	J	AH	Bracket,STB Gear
106	MLEVP0098AWZZ	J	AB	Lever,Tray Lock
107	MSPRP0040AWFW	J	AD	Spring,Tray Lock Lever
108	GCOVA1354AWZZ	J	AF	Tray 1
109	GCOVA1355AWZZ	J	AF	Tray 2
110	GCOVA1356AWZZ	J	AF	Tray 3
111	GCOVA1357AWZZ	J	AF	Tray 4
112	GCOVA1358AWZZ	J	AF	Tray 5
113	GCOVA1359AWZZ	J	AF	Tray 6
114	LPLTP0010AWZZ	J	AG	Top Plate,R
115	MCAMP0009AWZZ	J	AE	Cam,Lift
116	NSFTT0057AWFD	J	AE	Shaft,Lift Cam
117	LPLTP0009AWZZ	J	AH	Top Plate,F
118	MLEVP0099AWZZ	J	AB	Lever,Disc OB
119	NGERH0098AWZZ	J	AC	Gear,STB Drive,A
120	NGERH0099AWZZ	J	AC	Gear,STB Drive,L
121	MLEVF0055AWFW	J	AC	Lever,OS,L/R
122	NGERH0100AWZZ	J	AC	Gear,STB Drive,R
123	MSPRT0040AWFJ	J	AB	Spring,OS Lever
124	NGERH0111AWZZ	J	AC	Gear,Tray Drive,R
125	NGERH0113AWZZ	J	AF	Gear,Tray Joint,B
126	NGERH0116AWZZ	J	AH	Gear,Mode Big
127	NGERH0117AWZZ	J	AC	Gear,Lift A
128	NGERH0118AWZZ	J	AB	Gear,Lift B
129	NGERH0119AWZZ	J	AF	Gear,Lift C
130	NGERH0115AWZZ	J	AC	Gear,Tray Idler
131	NGERH0106AWZZ	J	AC	Gear,MT Idler,F
132	NGERH0120AWZZ	J	AB	Gear,STB A
133	NSFTT0055AWM1	J	AH	STB Gear Ass'y
133- 1	NGERH0122AWZZ	J	AC	Gear,STB C
133- 2	NSFTT0055AWFD	J	AG	Shaft,STB Gear
133- 3	NGERH0123AWZZ	J	AC	Gear,STB D
134	NGERH0108AWZZ	J	AK	Gear,Tray Big
135	NGERH0109AWZZ	J	AB	Gear,Tray A
136	NGERH0110AWZZ	J	AC	Gear,Tray B
137	NGERH0103AWZZ	J	AB	Gear,MT Idler,C
138	NGERH0102AWZZ	J	AC	Gear,MT Idler,B
139	NGERH0105AWZZ	J	AB	Gear,MT Idler,E
140	NGERH0104AWZZ	J	AB	Gear,MT Idler,D
141	NGERH0101AWZZ	J	AD	Gear,MT Idler,A
142	NGERH0114AWZZ	J	AB	Gear,Tray C
143	NGERH0107AWZZ	J	AC	Gear,Tray Drive,F
144	NGERH0112AWZZ	J	AF	Gear,Tray Joint,F
145	MLEVP0097AWZZ	J	AB	Lever,Lift
146	NSFTT0056AWFD	J	AC	Shaft,Lift Lever
147	LHLDZ1270AWZZ	J	AH	Holder,STB
148	PMAGF0001AWZZ	J	AF	Magnet
149	LHLDM1011AWZZ	J	AD	STB FH
150	92LNBAND1318A	J	AA	Nylon Band,80mm
151	QCNCW025DAWZZ	J	AB	Holder,Flat Wire,4Pin
152	QCNCW025HAWZZ	J	AC	Holder,Flat Wire,8Pin
801	XBPSD26P04000	J	AA	Screw,ø2.6×4mm
802	XEBSD20P07000	J	AB	Screw,ø2×7mm
803	XEBSD20P10000	J	AA	Screw,ø2×10mm
804	XHBSD20P05000	J	AA	Screw,ø2×5mm
805	LX-EZ0005AWFD	J	AA	Screw,ø2.6×10mm
806	LX-EZ0026AWFD	J	AB	Screw,ø2×9mm
807	LX-JZ0105AFFN	J	AA	Screw,ø1.7×5mm
808	XEBSD30P10000	J	AA	Screw,ø3×10mm
MOB1	92LMTR3435DASY	J	AM	Main Cam Motor Ass'y
MOB2	92LMTR3435DASY	J	AM	Tray Motor Ass'y

CABINET PARTS

201	92LCAB3631AASY	J		Front Panel Ass'y
201- 1	————		—	Front Panel (Not Replacement Item)
201- 2	GDORF0101AWSA	J	AF	Holder,Cassette [Tape 1]
201- 3	GDORF0102AWSA	J	AF	Holder,Cassette [Tape 2]
201- 4	HDECQ0692AWSB	J	AE	Panel,Cassette [Tape 1]
201- 5	HDECQ0693AWSB	J	AE	Panel,Cassette [Tape 2]
201- 6	GCOVA1360AWSA	J	AH	Cover,Cassette [Tape 1]
201- 7	GCOVA1361AWSA	J	AH	Cover,Cassette [Tape 2]
201- 8	GDORF0103AWSA	J	AE	Door,Changer
201- 9	HDECQ0753AWSA	J	AH	Panel,Amp.
201-10	JKNBZ0785AWSA	J	AE	Button,Power/Dimmer

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
201-11	JKNBZ0786AWSA	J	AF	Button,Disc Number
201-12	JKNBZ0787AWSA	J	AD	Button,Function
201-13	JKNBZ0788AWSA	J	AF	Button,Play/Stop
201-14	JKNBZ0789AWSA	J	AF	Button,Tuning
201-15	JKNBZ0790AWSA	J	AE	Button,CD Eject
201-16	JKNBZ0791AWSA	J	AE	Button,X-Bass
201-17	HDECQ0695AWSA	J	AG	Panel,Top
201-18	GCOVA1362AWSA	J	AC	Cover,Play/Stop
201-19	HDECQ0698AWSA	J	AE	Panel,Changer Door
201-20	LHLDZ1335AWSA	J	AC	Holder,Changer Door
201-21	MSPRD0160AWFJ	J	AB	Spring,Changer Door
201-22	HDECQ0699AWSA	J	AG	Panel,Main Control
201-23	GCOVA1287AWSA	J	AG	Cover,Remote Sensor
201-24	GCOVA1364AWSA	J	AB	Cover,Timer
201-25	HDECQ0708AWSA	J	AD	Decoration Plate,Function,Left
201-28	MLIFP0010AWZZ	J	AD	Damper
201-29	HBDGB1001AWSA	J	AD	Badge,SHARP
201-30	MSPRD0165AWFJ	J	AB	Spring,Cassette,Tape 1
201-31	MSPRD0166AWFJ	J	AB	Spring,Cassette,Tape 2
201-32	JKNBZ0792AWSA	J	AE	Button,RDS
202	92LCAB3629BASY	J		Side Panel Ass'y,Left
202- 1	————		—	Side Panel,Left (Not Replacement Item)
202- 2	PCUSG0022AWZZ	J	AB	Cushion,Leg
203	92LCAB3629CASY	J		Side Panel Ass'y,Right
203- 1	————		—	Side Panel,Right (Not Replacement Item)
203- 2	PCUSG0022AWZZ	J	AB	Cushion,Leg
204	GCAB-1193AWSA	J	AN	Cabinet,Top
205	LCHSM0124AWFW	J	AQ	Main Chassis
206	LHLDZ1334AWZZ	J	AE	Holder,FL Display
207	GITAR0750AWSA	J	AQ	Rear Panel [Except for U.K.]
207	GITAR0751AWSA	J		Rear Panel [For U.K.]
208	LANGK0188AWFW	J	AF	Bracket,Fan Support
209	LANGK0236AWFW	J	AE	Bracket,Heat Sink Left
210	LANGK0237AWFW	J	AE	Bracket,Heat Sink Right
211	92LCSPR1431C	J	AA	Spring,Ring
212	NFANP0001AWZZ	J	AD	Rotary Fan
213	LANGK0256AWFW	J	AC	Bracket,Cassette Lock [Tape 1]
214	LANGK0257AWFW	J	AC	Bracket,Cassette Lock [Tape 2]
215	MLOKC0010AWZZ	J	AC	Lever,Cassette Lock [Tape 1]
216	MLOKC0011AWZZ	J	AC	Lever,Cassette Lock [Tape 2]
217	MSPRD0109AWFJ	J	AB	Spring,Cassette Lock [Tape 1]
218	MSPRD0110AWFJ	J	AB	Spring,Cassette Lock [Tape 2]
219	LHLDZ1333AWZZ	J	AC	Holder,LED
220	PRDAR0184AWFW	J	AH	Heat Sink,Sub
221	PRDAR0192AWFW	J	AV	Heat Sink,Main
⚠ 222	QACCB0009AW00	J	AL	AC Power Supply Cord
⚠ 222	QACCE0010AWZZ	J		AC Power Supply Cord
223	QCNWN1860AWZZ	J	AC	Lug Wire
224	LBSHC0002AWZZ	J	AD	Bushing,AC Power Supply Cord
⚠ 225	QFSHD0001AWZZ	J	AB	Holder,Fuse
226	92LNBAND1318A	J	AA	Nylon Band,80mm
227	LCHSZ0021AWZZ	J	AL	Chassis,Changer
228	KMECB0021AWZZ	J	BF	Tape Mechanism Ass'y
228- 1	92PF513-860	J		Head Plate Block [Tape 2]
228- 2	92PF525-338	J		Motor with Pulley [Tape]
228- 3	92PF567-649	J		Tape Mechanism PWB Ass'y
228- 4	92PFF19U-12	J		Belt,Main [Tape 2]
228- 5	92PF514-135	J	AL	Pinch Roller
228- 6	92PF19S-31	J		Belt,FF/REW [Tape 2]
228- 7	92PFF19N-11	J		Belt,Main [Tape 1]
228- 8	92PF522-061	J		Clutch Ass'y Block [Tape 1]
228- 9	92PFF19S-52	J		Belt,FF/REW [Tape 2]
228-10	92PF513-861	J		Head Plate Block [Tape 1]
228-11	92PF522-063	J		Clutch Ass'y Block [Tape 2]
229	PCUSG0022AWZZ	J	AB	Cushion,Leg
230	JKNBZ0784AWSA	J	AF	Knob,Volume
231	LHLDK9001AW00	J	AB	Poly Core Tie
232	92LCAUT1706A1	J	AC	Label,Class 3
233	92LCAUT1706B	J	AA	Label,Laser
234	PSHEZ0126AWZZ	J	AC	PC Sheet
235	LANGK0272AWFW	J	AF	Bracket,Fan Support
236	PSLDM3015AWFW	J	AD	Shield Plate
601	LX-BZ2222AXZZ	J	AB	Screw,Special
602	XEBSD30P08000	J	AA	Screw,ø3×8mm
603	XEBSD30P06000	J	AA	Screw,ø3×6mm
604	XEBSD30P14000	J	AA	Screw,ø3×14mm
605	LX-HZ0009AWFD	J	AC	Screw,Special
606	XHBSD26P04000	J	AA	Screw,ø2.6×4mm
607	LX-LZ0006AWZZ	J	AC	Holder,PWB
608	XESSD30P10000	J	AA	Screw,ø3×10mm
609	LX-HZ0082AFZZ	J	AA	Screw,ø4×8mm
610	LX-JZ0010AFFD	J	AA	Screw,ø3×10mm
611	XJBSD30P10000	J	AA	Screw,ø3×10mm
612	XJSSD30P10000	J	AA	Screw,ø3×10mm
613	XJBSD30P12000	J	AA	Screw,ø3×12mm
614	XBBSD20P04000	J	AA	Screw,ø2×4mm
616	XJBSF30P08000	J	AA	Screw,ø3×8mm
617	XJBSD30P16000	J	AA	Screw,ø3×16mm
619	XJBSD30P08000	J	AA	Screw,ø3×8mm
620	XEBSD30P12000	J	AA	Screw,ø3×12mm
621	LX-BZ0880AFZZ	J	AC	Screw,ø2×4mm
622	LX-BZ0062AWF2	J	AD	Screw,Transport

ACCESSORIES/PACKING PARTS

1	QANTL0008AWZZ	J	AH	AM Loop Antenna
2	SPAKA0297AWZZ	J		Packing Add.,Front/Rear
3	SPAKC1133AWZZ	J		Packing Case [Except for U.K.]
3	SPAKC1249AWZZ	J		Packing Case [For U.K.]
4	SPAKP0032AWZZ	J	AF	Polyethylene Bag,Unit
5	SSAKA0007AWZZ	J	AB	Polyethylene Bag,Accessories
6	TGAN-3170UMZZ	J	AE	Resistration Card [For U.K.Only]
7	TINSE0374AWZZ	J		Operation Manual [For U.K.]
7	TINSZ0690AWZZ	J	AR	Operation Manual [Except for U.K.]
8	TINSE0375AWZZ	J		Quick Guide [For U.K.Only]
9	TLABE0499AWZZ	J		Label,Bar Code
10	TLABZ0605AWZZ	J	AB	Label,Saving Energy
11	TLABZ0874AWZZ	J	AC	Label,Feature [Tape 1]
12	92LBAG1770A	J	AB	Polyethylene Bag,AC Power Supply Cord
13	92LFANT1535A	J	AF	FM Antenna
14	RRMCG0266AWSA	J	AQ	Remote Control
14-1	GFTAB1022AWSB	J	AK	Battery Lid,Remote Control
15	TLABZ0944AWZZ	J		Label,Feature [Tape 2] [For U.K.]
15	TLABZ0932AWZZ	J		Label,Feature [Tape 2] [Except for U.K.]
16	TLABZ0607AWZZ	J	AB	Label,GEA (Set) [Except for U.K.]
17	————			Battery (Not Replacement Item)

P.W.B. ASSEMBLY (Not Replacement Item)

PWB-A	92LPWB3631MANS	J	—	Main
PWB-B1~4	92LPWB3631DPLS	J	—	Display/Eject Switch/Play Switch/ Headphones (Combined Ass'y)
PWB-C	92LPWB3631CDUS	J	—	CD Servo
PWB-D1~3	92LPWB3631PWRS	J	—	Power Amp./Power A/Power B (Combined Ass'y)
PWB-E	QPWBF0644AWZZ	J	AD	Tray Switch (PWB Only)
PWB-F	QPWBF0645AWZZ	J	AC	Cam Switch (PWB Only)
PWB-G	QPWBF0027AWZZ	J	AD	CD Motor (PWB Only)
PWB-H	92PF567-649	J	—	Tape Mechanism

OTHER SERVICE PART

	UDSKA0004AFZZ	J	AZ	CD Pickup Lens Cleaner

CP-BA3100H

SPEAKER BOX PARTS

901	HPNLS1021AWSA	J	AY	Front Panel,Left
901	HPNLS1022AWSA	J	AY	Front Panel,Right
902	CWAKP1046AWSB	J		Net Frame Ass'y
903	GBOXS2005AWSB	J		Speaker Box Ass'y,Right
903	GBOXS4005AWSB	J		Speaker Box Ass'y,Left
904	CPNLS1023AWSA	J	AX	Subwoofer Panel Ass'y,Left
904	CPNLS1027AWSA	J	AX	Subwoofer Panel Ass'y,Right
905	PCUSS0049AWZZ	J	AD	Port Cushion
906	PCUSG0022AWZZ	J	AB	Foot Cushion
907	LHLDZ8001AWSA	J	AD	Catching Holder
908	QCNWN1834AWZZ	J	AK	Tweeter Cord (With Capacitor C1,2)
909	XJBSD40P20000	J	AA	Screw,ø4×20mm
910	XJBSD40P16000	J	AB	Screw,ø4×16mm
911	XJBSD30P10000	J	AA	Screw,ø3×10mm
912	XMBSD40P16000	J	AC	Screw,ø4×16mm
913	XMBSF40P20000	J	AC	Screw,ø4×20mm
914	PFLT-0046AWZZ	J	AC	Felt

CD-BA3100H

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
915	TSPC-0879AWZZ	J		Label,Specifications
916	QCNWN1912AWZZ	J		Subwoofer Cord
917	QCNWN1903AWZZ	J		Woofer Cord
SP1,2	RSPA00010AW6T	J	AP	Tweeter
SP3,4	RSPA10010AW6S	J	AX	Woofer
SP5,6	RSPA10011AW6W	J	AY	Subwoofer

PACKING PARTS

1	SPAKA0299AWZZ	J		Packing Add.
2	SPAKZ0696AWZZ	J		Layer Pad
3	SSAKH0053AWZZ	J	AC	Polyethylene Bag,Speaker

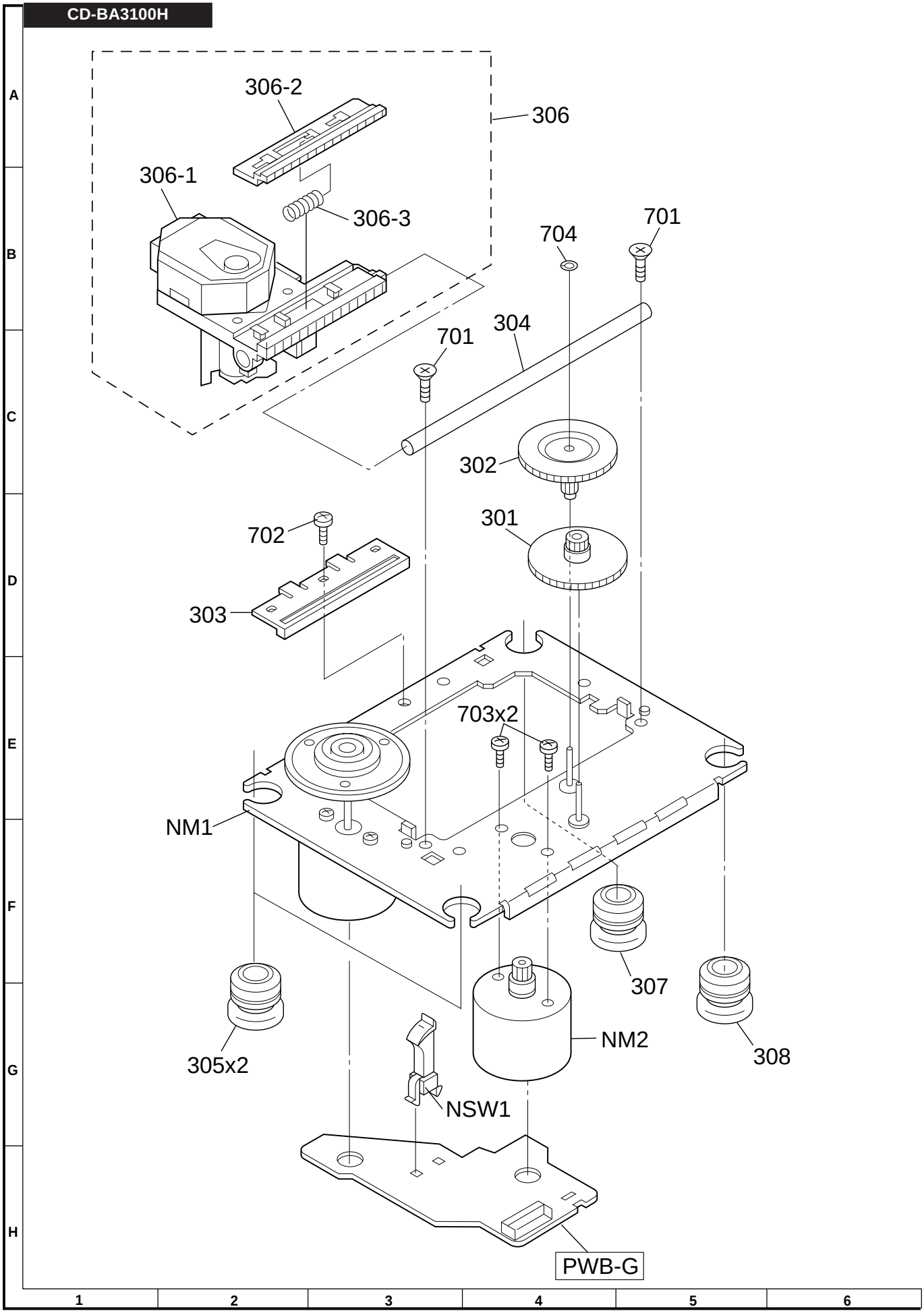
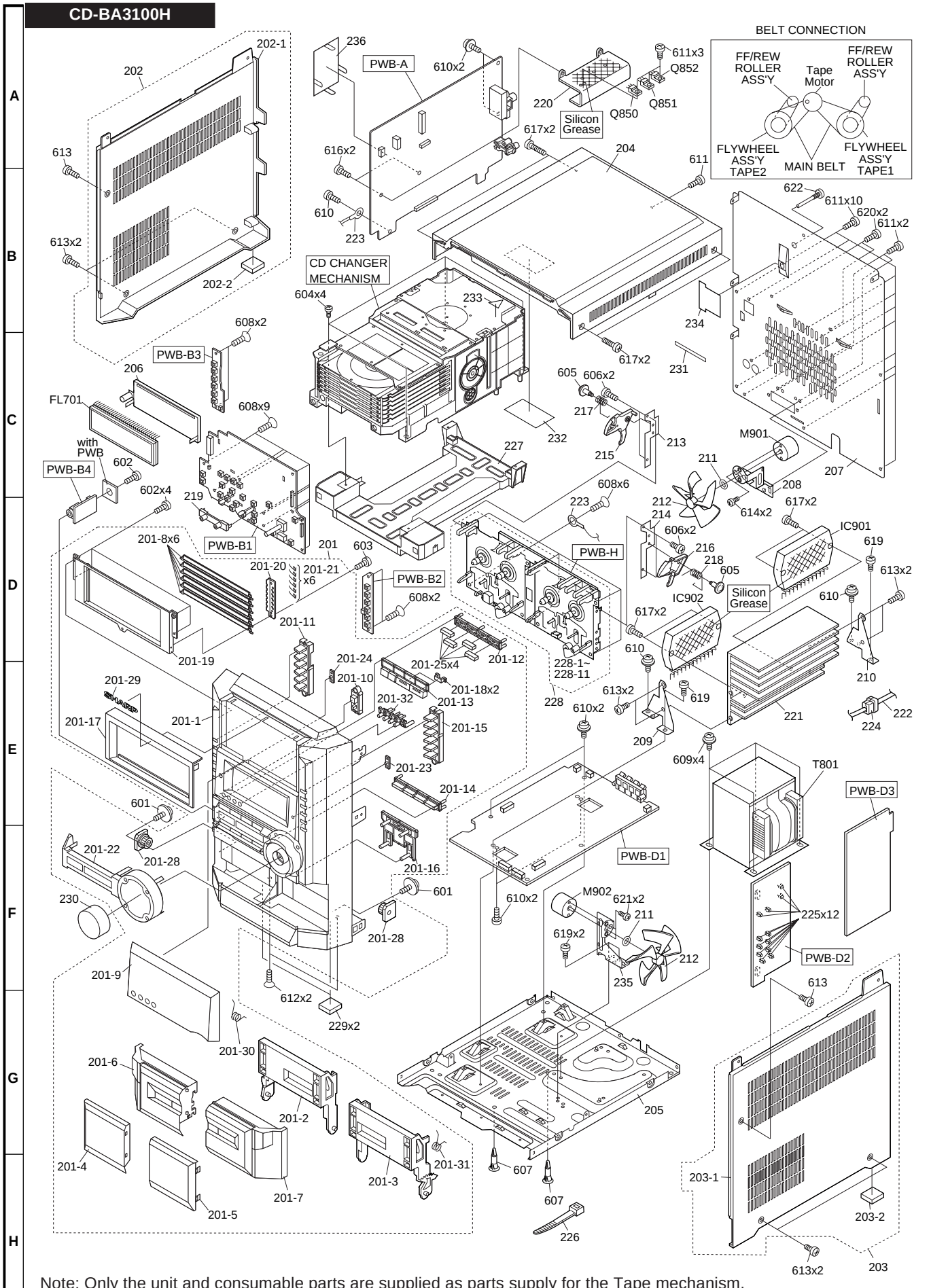


Figure 8 CD MECHANISM EXPLODED VIEW



Note: Only the unit and consumable parts are supplied as parts supply for the Tape mechanism.

Figure 9 CABINET EXPLODED VIEW

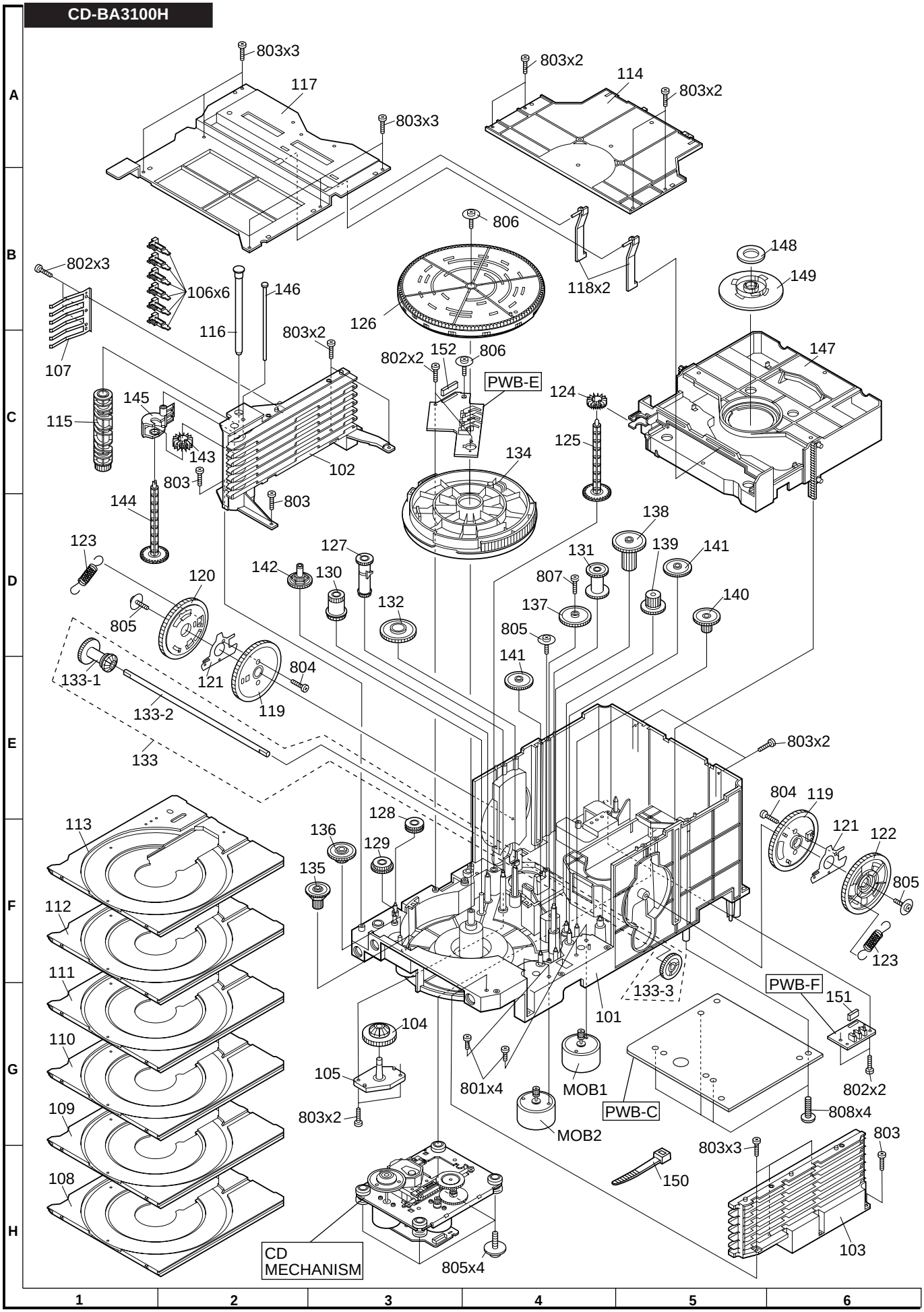


Figure 10 CD CHANGER MECHANISM EXPLODED VIEW

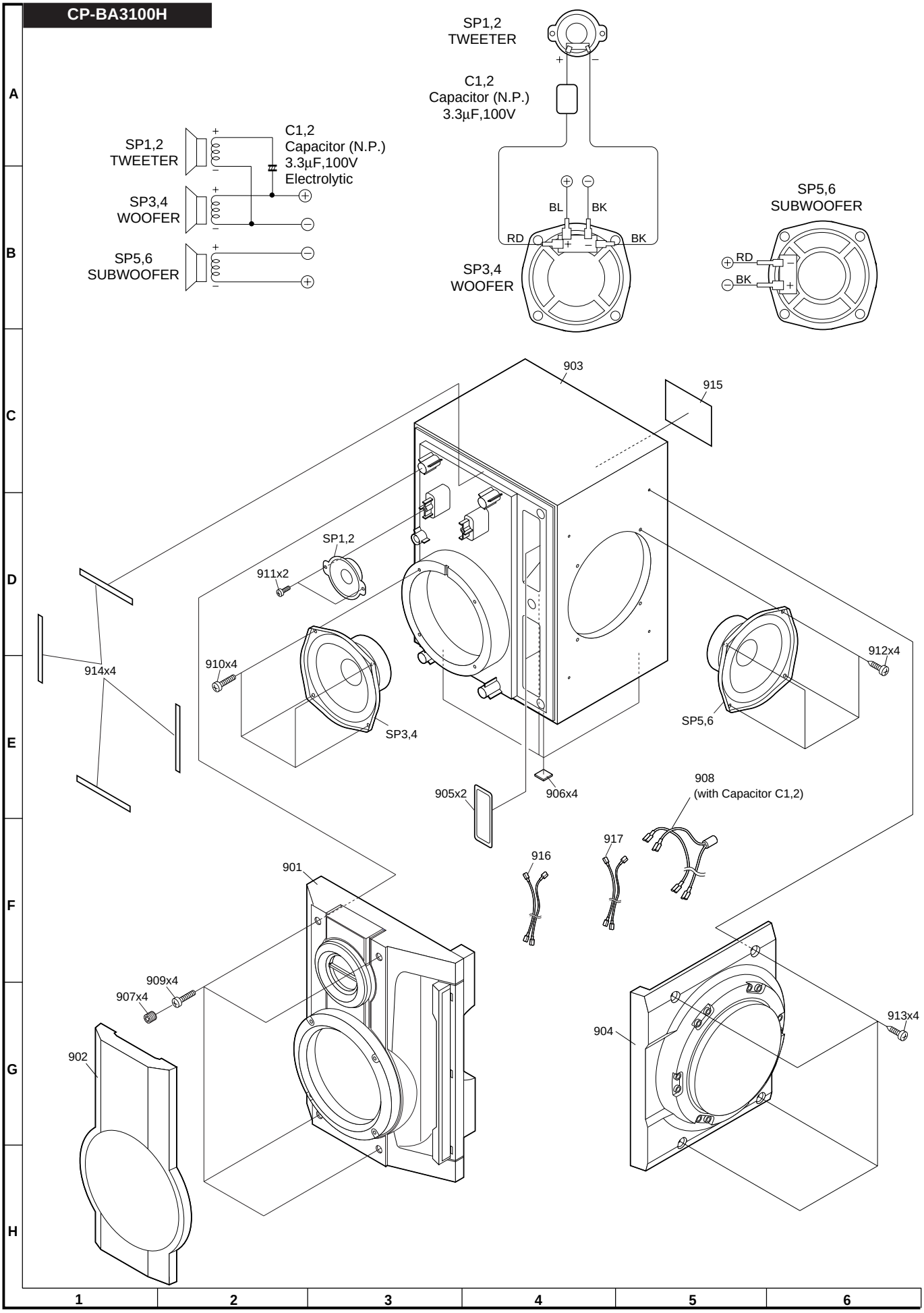


Figure 11 SPEAKER EXPLODED VIEW

PACKING METHOD (FOR U.K. ONLY)

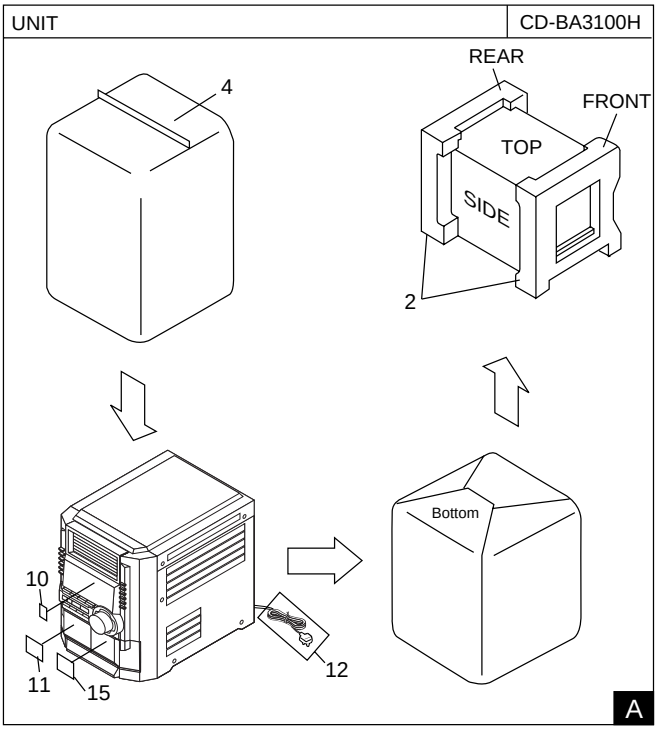
Setting position of switches and knobs	
Tape Mechanism	STOP

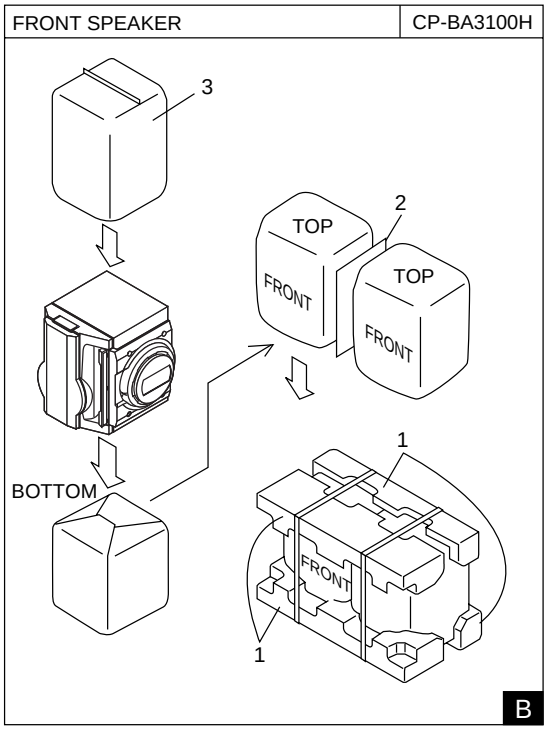
CD-BA3100H

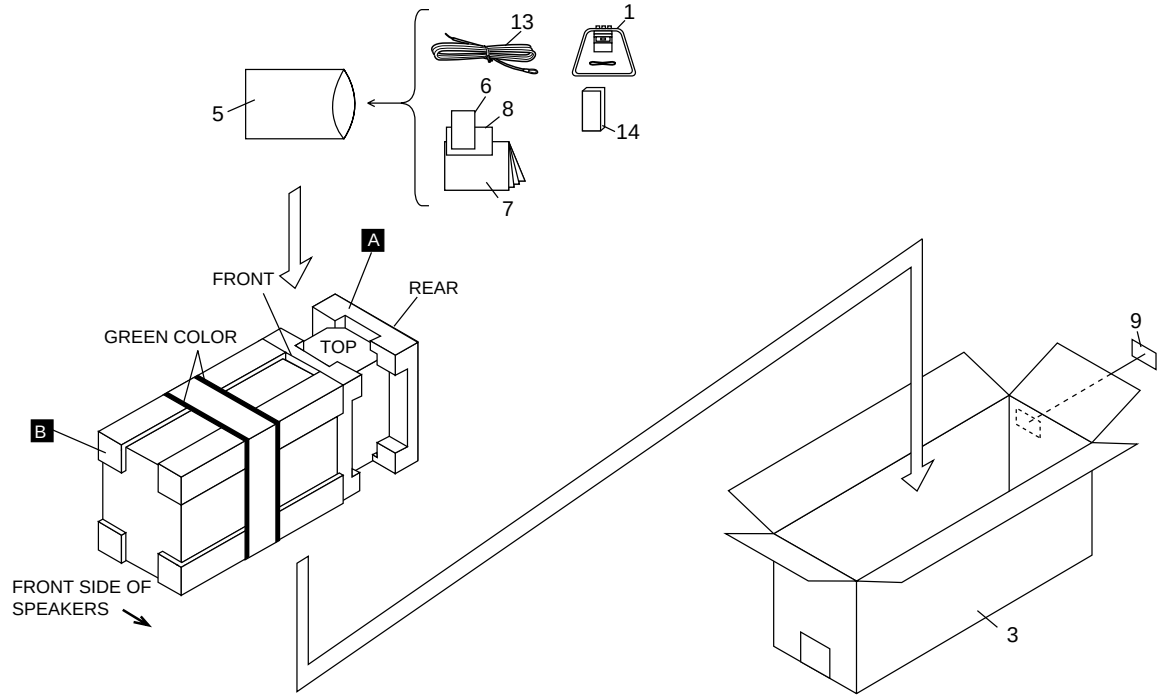
1. AM Loop Antenna	QANTL0008AWZZ
2. Packing Add., Front/Rear	SPAKA0297AWZZ
3. Packing Case	SPAKC1249AWZZ
4. Polyethylene Bag, Unit	SPAKP0032AWZZ
5. Polyethylene Bag, Accessories	SSAKA0007AWZZ
6. Resistration Card	TGAN-3170UMZZ
7. Operation Manual	TiNSE0374AWZZ
8. Quick Guide	TiNSE0375AWZZ
9. Label, Bar Code	TLABE0499AWZZ
10. Label, Saving Energy	TLABZ0605AWZZ
11. Label, Feature [Tape 1]	TLABZ0874AWZZ
12. Polyethylene Bag, AC Power Supply Cord	92LBAG1770A
13. FM Antenna	92LFANT1535A
14. Remote Control	RRMCG0266AWSA
15. Label, Feature [Tape 2]	TLABZ0944AWZZ

CP-BA3100H

1. Packing Add.	SPAKA0299AWZZ
2. Layer Pad	SPAKZ0696AWZZ
3. Polyethylene Bag, Speaker	SSAKH0053AWZZ







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